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LATENT RHEUMATISM.

BY

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An out-patient note-book may be made valuable when there is time and efficient assistance to record cases; but single-handed, and with a large number of patients, this is not always possible. Nevertheless, I venture to hope that the following imperfect notes, of two or three cases out of many, may be useful in drawing attention to one of the minor ailments of life, under cover of which there may be prolonged malaise, or formidable disease develop.

From text-books there is little to be learned on the subject of latent subacute rheumatism. The fullest description of the subject is found in Quain's *Dictionary*, and there only alluded to with reference to the growing pains of children.

The pains which young people, especially girls, complain of in the left breast are generally treated with scant consideration, being referred to indigestion, hysteria, or rheumatism, for which no particular treatment or examination is required, because there is no particular appearance or sign of active disease. It has often occurred to me that there was something of more serious import underlying this condition, and that the seat of discomfort was not duly examined from motives of delicacy; and, also, because in young girls or women both glands at a certain age take on a hyperæsthetic condition. In the cases to be detailed the pain was confined to the left breast, and had nothing to do with the gland, for when the gland was moved bodily there was no pain: pain was only elicited when digital pressure was employed between the ribs beneath the gland, chiefly below the apex-beat and to the left. Besides this pain there were also "fleeting pains" in one or more of the joints, so slight as to be forgotten until enquired for—even then not always remembered distinctly. The urine had not always been noticed, and might or might not be high-coloured. As a rule, no feverish condition was complained of, but generally constipation; and bruit de diable was always present. Occasionally palpitation and shortness of breath. Menstruation not always normal.

At Christmas, 1883, E. S., æt. 20, came to my house at Preston. She was naturally bright and active, and three months previously appeared to be in good health. But on this occasion she was dull and listless; her movements slow and languid, walking with care, soon out of breath, and exceedingly pale. Made no complaint of pain anywhere, but sat still and did nothing. The heart's sounds were muffled; there was a soft systolic bruit at

the apex, with tenderness on pressure over the whole of the cardiac region. No abnormal dulness, and no friction sound. Slight dulness over the right apex, and feeble respiratory murmur. No cough. Bruit de diable loud. An œdematous condition of both ankles and legs, chiefly the left. There were tenderness and hardness in the course of the left femoral vein. Pain on pressure over the right hip-joint, with some fulness; afterwards in the left hip-joint. The right apex, cardiac region and hip-joints were painted with iodine liniment every second or third day according to the extent of tenderness. Internally dilute nitro-muriatic acid in twenty-drop doses, with tincture of iron in fifteen-drop doses, were prescribed three times daily. This was varied from time to time, so that the stomach should not be wearied by one form of drug. But the external application was persisted in so long as there was any tenderness or swelling. The femoral vein was left to take care of itself; as her health improved, the tenderness and hardness gradually disappeared. At the end of two months she was able to run up and down stairs without reproducing the murmur, when she was transferred to Bournemouth, where she completed her recovery.

This young lady's case perplexed me considerably at first, for the idea of latent subacute rheumatism was not present to the mind. The above detail was not unfolded all at once: the heart and vessels first engaged attention; later on, the hip-joints; then, gradually, the pathological relation between the heart and hip-joints was established.

Rheumatism is characterised by inflammation of the fibrous structures, and when it is latent "the joints are so slightly affected that its signs and symptoms may be entirely overlooked." Pain and tenderness in children are

often disregarded, or called "growing pains," or ascribed to "a cold." The subjects of these "fleeting pains" and cardiac tenderness are not confined to children, but extend to others of older growth. In the absence of the well-known symptoms of acute rheumatism, there is a latent form which, if recognised and treated, leads to ease, comfort, and recovery; if neglected, may lead to long-continued discomfort, for which the doctor obtains no credit.

Women are more subject to rheumatic diseases of the heart than men; this may be the result of imperfect nutrition, induced by the action of stays, which by compressing the lower ribs prevent the gentle rise and fall of abdominal viscera, especially expansion of the liver and spleen during digestion, essential to a free performance of their duties, and prohibit the heart's descent of one inch and a half eighteen times in a minute, to say nothing of the structural injury inflicted on the liver and stomach. This impediment to the heart's free movement has, it appears to me, much to do with the pain situated near the heart's apex in some cases. It is discoverable only by digital pressure or on application of an intercostal stethoscope. Probably this pain arises from a hyperæmic condition of that portion of the pericardium attached to the central tendon of the diaphragm, through abnormal approximation of the visceral and parietal layers due to imperfect descent of the diaphragm in respiration. This pain and tenderness, then, might more properly be referred to pericarditis, which in many cases is so mild a disorder that it is attended with few or no symptoms of importance. "In the mildest form pericarditis often escapes detection, or is recognised only by the accidental discovery of pericardial friction; in most such cases, however, there is some

time or other slight præcordial pain or uneasiness, together with extension of cardiac dulness and febrile disturbance. Most cases of what are termed 'latent' and 'dry' pericarditis belong to this group." The symptoms of rheumatic pericarditis are "dyspnœa, palpitation, and a sense of oppression increased by pressure in the intercostal spaces." "Muscular rheumatism also attacks the heart, causing violent palpitation."

The following case of a dispensary patient, following her daily occupation in an upholsterer's shop, combines an interesting series of events which illustrates most of the foregoing extracts from well-known text-books :—

E. R., æt. 19, 5th Feb., 1887, a fresh-complexioned, stout, healthy-looking girl, pale, complained of pain over the left breast, a fulness after meals with some eructation; of pain and violent palpitation at night. Has had "fleeting pains" in several joints, at present in her elbows and forehead. There is some heaving in the cardiac region, with tumultuous action of the heart, shortness of breath on exertion, and pain on pressure in the intercostal spaces, mostly in the 5th and 6th interspaces, extending to the outer side of the breast. Slight bruit de diable, clean tongue, slight constipation. Liniment of iodine was applied once a week, and a mixture of nitro-muriatic acid diluted, with digitalis and quassia. 19th Feb. she was much better; able to scrub out a room and walk upstairs without distress. Heart's action quieter, and pain limited to one small spot. Iron tincture was added to the mixture. 26th Feb. had lost all pain in her joints, but complained of tightness over the cardiac region. The heart is still tumultuous. On the 5th March the digitalis was omitted from the mixture. On the 8th March the tightness had increased, but the heart's action was quieter,

and there was considerable swelling of the 6th and 7th intercostal cartilages at their junction with the ensiform cartilage—a distinct oval prominence about an inch and a half long and not quite half an inch broad. It was not tender. It was painted with iodine. On the 12th March this swelling had somewhat subsided, but she now complained of oppressive tightness over the manubrium sterni. There was no pitting, no redness, but the skin was not freely movable. On the 19th March the cartilaginous swelling had further decreased, but the tightness over the manubrium had increased. She complained of pain and oppression mostly between 3 and 5 p.m., or for longer; and it was especially worse if the workroom became hot. There was no tenderness, but a diffused swelling and immobility of the skin. Mixture was continued. On the 26th March, the heart's action was normal; the tight area had decreased, the cartilaginous swelling was going down. The painting with iodine was steadily continued. 2nd April. Had felt pretty well during the past week: only complained of the pain and sensation of tightness twice. 9th April. Tumefaction over the sternum disappearing, and felt the tight feeling only once. The lower swelling almost imperceptible. On the 16th April she was fairly well, and ceased to attend. On the 20th May she wrote to say she was not able to attend, but was a little better; so it is presumed she had not entirely recovered, or probably suffered from slight relapse.

Mrs. R., æt. 30, pale and thin, on the 14th May complained of pain in her joints. She had some feverish symptoms and thirst, with pain on pressure beneath the left breast. No palpitation. The same mixture and local application were employed. On the 17th May she had improved, but had cartilaginous swelling of the 6th,

7th, and 8th ribs at their junction with the ensiform cartilage, also pain in the right knee and toes. On the 21st May she was improving. On the 28th she did not appear; so it may be presumed she is progressing favourably.

She made a good recovery.

E. T., æt. 27, 1st March, 1887, a cook, stout and of strumous habit, pale, had pain in joints and pain in the cardiac region. On pressure in the intercostal spaces, there was considerable tenderness extending from the left border of the sternum beyond the nipple-line. She had scanty and irregular periods of menstruation, constipation, and bruit de diable. She had inhabited a room over the water-tank of the house, and many former occupiers had been unwell. Last year she was under treatment for anæmia and had recovered, living in the same situation, but now occupying a better bedroom. A mixture of iron, acids, Epsom salts and quassia, with cod oil, were prescribed, and weekly painting with iodine. On the 5th April she was considerably improved in all respects. The cardiac pain had not entirely disappeared. The local application was used once a fortnight. On the 24th May she had lost all cardiac tenderness, and felt free from pain and discomfort: to continue iron, arsenic, and chiretta mixture, with cod oil, for another fortnight.

A. M., æt. 16, a kitchen-maid, stout, fresh-complexioned girl. Gums and fauces pale, loud bruit de diable. "Fleeting pains" in her joints, cardiac pain over area of pulmonary artery; this gradually disappeared, and was transferred to the 5th and 6th interspaces. Suffered from constipation. No appetite; menstrual flow pale. Tenderness over 1st and 2nd dorsal vertebræ. Ordered to take acid, iron, and quassia mixture after meals, with aloes and iron pill at bedtime. On the 10th May was much improved: to

continue mixture, and take a morning aperient of scruple doses of compound jalap powder and sulphur. Locally, the iodine liniment as before. On the 24th May she had nearly lost the cardiac tenderness and that over the dorsal vertebræ. Going for a month into the country.

She returned from the country with incipient varicose vein in the left leg, a return of pain in the spine and cardiac region. Complained of "fainting fits" in her household work. Being a good-looking girl, though stout, she aspired to slimness of waist: the "fits" ceased when the stays were worn loose; she speedily recovered.

A stout, active lady, æt. 54, fell downstairs last September. Six weeks later suffered from inability to take carriage exercise, owing to extreme tenderness of the whole spinal column. She so far recovered this, that in March she left London for the country. On several occasions she had complained of a rheumatic affection of the joints, "fleeting pains," and latterly of puffiness of the face and swelling of the left jaw. Just before leaving, the heart's sounds were found to be muffled at the apex. She looked pale, and generally out of health, though she had been taking various tonics. Her brother, a medical man, was communicated with; he found "the percussion note normal all over the cardiac area; the apex-beat in the right position. I found, as you say, the sounds rather muffled and distant at the base; but at the apex they were very clear. Both sounds otherwise were normal; and there is certainly no evidence of valvular mischief. The pulse too is regular and of good volume, 76. She complains very much of pain over the occipito-parietal suture, which, I should imagine, is due to the great nervous shock she must have received in that fall; and I should consider the muffled heart-sound is due to the

same cause. Her tongue is very flabby, and indicative of want of tone." Prescribed acid, nux vomica, digitalis, and quassia. She improved greatly, and returned to London at the end of three weeks. The heart's sounds were found to be stronger at the apex, and the general aspect improved. She continued the mixture she had been taking for a week longer. On digital pressure below the apex-beat, and over the left and outer side of the cardiac region, pain was elicited; to this, liniment of iodine was applied once a week. Tenderness has slowly decreased; only a small tender spot remains. Within ten days of her return, puffiness of the face and swelling of the jaw re-appeared for a couple of days. At present, the heart's sounds are full-toned and regular. Dyspnœa on prolonged exertion.

Had the cardiac tenderness been recognised in this case there would probably have been no relapse, and a lingering malaise avoided. Her improved health is attributable solely to the local treatment, which is not yet omitted.

The local treatment was continued fortnightly for two months longer. She is now well, and can walk uphill without discomfort.

I have ventured to record these few cases, recently under treatment, because the persons are fresh in the memory, for the purpose of drawing attention to careful digital exploration of the intercostal spaces in the cardiac neighbourhood, and to show the value of local treatment in cases which appear to be trifling. There was no hysterical tendency in any of the patients; and to guard against sympathetic influence, comparison was made with the opposite side. All the cases were, what would be termed, "anæmic," and would be treated by restoratives;

but an endeavour has been made to show that these agents will not of themselves, unless supplemented, suffice to produce a restoration to health in rheumatic anæmia or latent subacute rheumatism, a condition which has to be sought out.

Before concluding this communication, I may perhaps be permitted to mention the value of free painting with liniment of iodine in acute rheumatic fever. A schoolboy, of 14 years, had a severe attack, with the usual high temperature, sweats, and so forth. The first day he was seen, the heart's sounds were found *slightly* muffled. The whole of the cardiac area was painted; the following day all muffling had disappeared. Every joint in his body in succession was attacked; each was painted with iodine on the occurrence of pain or redness. The painting was repeated in many instances, and the cardiac areas required repeated attention. The other treatment was with bark and acids, and finally iron. The case was extremely severe; but he made a good recovery, and without the slightest damage to the heart. It is unnecessary to point out the value of this counter-irritation on the local and general circulation, nor yet on the reflex action through the brain and cord centres, by which a change is induced in the nutrition of the tissues.

HOARSENESS AND LOSS OF VOICE.

BY

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IN the term "hoarseness" I include not only those coarse changes in the voice which render it rough and husky, but also those finer ones, by which it is altered in *pitch* as well as in *clearness*. Owing to these changes, a person who normally sings tenor songs is unable any longer to do so, because the highest notes first lose their clearness, and then are lost altogether, the compass being thereby lessened; along with this, it is found that all the notes that are left have lost their clearness and tone, and fatigue of voice very soon ensues, after an attempt is made to sing.

Now, although there is this most noticeable interference with the power and range of the *singing voice*, there may be nothing abnormal in the *speaking voice*, except that, perhaps, it is slightly deepened; it is not, in other words, *hoarse*, in the ordinary acceptation of that term.

It is, however, most important not to overlook this alteration of vocal power, as grave disease, quite unsuspected by the patient, and for which he therefore does not come for medical advice, may be present, and may be the cause of the change.

Hoarseness and aphonia are symptoms found in very widely different diseases, some of which affect the larynx, others affecting other parts of the body, notably the chest. These symptoms, therefore, are often of great value in throwing light on otherwise obscure cases, and if (as I believe ought to be done) a systematic laryngoscopic examination were always carried out, where these symptoms are or have been present, more accuracy of diagnosis and of treatment would be ensured.

Excluding cases of acute tonsillitis and pharyngitis, in which there was a certain amount of thickness of voice and difficulty in speaking, owing to the pain and dryness of the throat present, and of chronic pharyngitis in which there was no accompanying chronic laryngitis, I have seen over 100 cases of hoarseness or loss of voice, the majority of which have been under my care at the Bristol General Hospital.

I find from notes of these cases that they may be thus divided up in order of frequency of cause:

1. Chronic Laryngitis.
2. Hysteria.
3. Phthisis Laryngea.
4. Laryngeal Anæmia, especially in Phthisis.
5. Acute Laryngitis.
6. Laryngeal Syphilis.
7. Growths in the Larynx.
8. Aneurism.
9. Œdema of the Larynx.

My experience doubtless agrees with that of all who have had an opportunity of observing cases of throat disease, in finding that *simple chronic laryngitis* is the commonest cause of hoarseness and loss of voice. Im-

pairment of the function of the larynx is the most striking feature of the disease, and this varies from only a slight deepening of the voice to huskiness, hoarseness, and loss of voice. Hawking and clearing the throat frequently is usually troublesome to the patient. Fatigue of voice soon supervenes after slight exertion, although it is very curious, that a person with this affection often speaks much more clearly after a few moments' use of the voice, than he did when he first began to speak.

If there is cough, it is usually hard and almost purposeless, a little pellet of mucus being expectorated after a great deal of exertion, secretion being rarely abundant.

On examining the patient with the laryngoscope, all the symptoms are explained. The whole larynx is more or less congested and swollen, the vocal cords are swollen, they vary in colour from yellow to bright red, and their free edges may be ulcerated and uneven. Mucus is seen attached to various parts of the mucous membrane, and especially to the edges of the vocal cords, this gives rise to the cough, and as it is only a small piece which sticks on the cords, it takes a good deal of coughing, before the muscles of the larynx are able to grasp it and throw it out.

The hoarseness and loss of voice are due to derangements in the mobility of the larynx, due, partly to the swollen inter-arytenoid mucous membrane, protruding between the vocal cords at their posterior ends, and so mechanically preventing their closure, partly to the fact that the ventricular bands also are swollen, and sometimes impede the true cords, added to which there is some interference with the muscular apparatus of the larynx, which is thus unable to close the glottis for purposes of speech.

The treatment consists in resting the voice as

much as possible, and, as several of my cases have been those of people who use their voices a good deal, *e.g.* preachers, school teachers, singers, and street hawkers, I have found how extremely valuable this is; in fact, it is almost impossible to cure the complaint, if the excessive use of the voice goes on. Avoidance of all irritating gases, dust, peppery food, smoking, alcohol, and hot fluids, must be insisted on.

In addition to this, astringents must be locally applied to the larynx, and especially to the vocal cords; and after having tried a good many remedies, my favourite solution for brushing the vocal cords is one of chloride of zinc—grs. xv. to xxx. to ʒj. of glycerine. This application must be made every day for a week or ten days, then every other day for a week, then every third day, and so on, the voice generally becoming clear in about a month, supposing it to be an average case, and all the directions given are followed out. The astringent application ought to be continued at intervals for some time longer, and, in fact, until the vocal cords have become white or nearly so, the swelling of the laryngeal mucous membrane has subsided, and the voice is not only clear, but remains so after considerable exertion. I may add, that I believe brushing with the astringent solution that I have mentioned, is infinitely better than insufflation of alum or any other astringent powder, as it can be so much more accurately applied, and distributes itself more thoroughly.

Hysterical Aphonia results from paresis or paralysis of the adductors of the vocal cords, the result of this being, that on attempted phonation there is a greater or less space left between the opposed edges of the cords, through which air escapes and a whispering voice is the result.

The loss of voice usually comes on quite suddenly,

and, as was the case in several of my patients, on awaking in the morning, and in many of them there was the common hysterical history of some emotional disturbance, trouble, &c., preceding it. The aphonia may be intermittent, attacking and leaving the subject of it quite suddenly. Reflex acts, such as coughing and sneezing, are normally performed, the former being often very loud, eliciting much sympathy and expressions of anxiety from injudicious friends.

Before diagnosing hysteria, the existence of deeply anæmic conditions, pulmonary phthisis, and other debilitating diseases, and thoracic tumours, ought to be excluded as far as possible. The laryngoscope must decide as to the existence of any affection of the larynx, other than the weak or paralysed condition of the muscles that close the glottis. I find that it is well to observe the vocal cords during expiration and inspiration, at rest and during phonation, by making the patient say "Ah" and "Ee;" and in a genuine hysterical case, whilst there is no such mechanical hindrance to closure of the glottis as one sees in chronic laryngitis, and whilst the vocal cords are of their usual colour, thickness, and so on, yet there is a chink of greater or less breadth left between their free edges, when speech is attempted, which shows the feebleness of the adductor muscles. The only point in the treatment worth referring to is, as to the value of endo-laryngeal Galvanism, which works wonders in some cases.

Amongst my cases of *phthisis laryngea*, there were three which were in the early stage, *i.e.* of infiltration and œdema. In one case there was swelling of the epiglottis, which was so altered in shape, as to assume the so-called "turban-like" form. This patient came to me merely complaining of soreness on swallowing; I

noticed, however, the peculiar deepening of his voice. On examining his fauces, there was nothing seen which could account for the sore throat; his lungs were distinctly diseased, and the laryngoscope revealed much œdematous swelling of the epiglottis, and also a little thickening of the mucous membrane over the arytenoid cartilages. From these appearances, and the chest condition, laryngeal phthisis could be diagnosed with confidence. I mention the case because it illustrates an axiom; viz., that *whenever there is pain on swallowing, and there are no pathological appearances of the fauces sufficient to account for the symptom, then a laryngoscopic examination ought never to be omitted.*

To allay the pain on swallowing, I have found a 10 per cent. solution of cocaine in glycerine of borax, painted on the epiglottis, is the best local treatment; along with which, all the usual measures for combating the lung mischief must of course be carried out; also, the patient ought to swallow nothing hot or irritating, nor ought he to use the voice too much.

In 12 other cases the disease had advanced to the stage of ulceration of epiglottis, laryngeal mucous membrane, and vocal cords. The symptoms varied according to the part attacked, *e.g.* hoarseness being prominent if the cords are attacked, soreness on swallowing if the epiglottis is diseased, and a peculiar deep voice if there is swelling and slight ulceration only of laryngeal mucous membrane.

In most cases of laryngeal phthisis, there is pain on swallowing, which may be so great as to induce the patient to almost starve, rather than submit to it. Here it is manifestly of first importance, if the patient is to be well nourished, that this symptom should be allayed; and many things have been tried in order to this. There is no doubt but that cocaine solutions, brushed or sprayed on to the

affected parts, have driven every other pain-stopping drug out of the field, and for brushing I use them strong, viz., 10 to 20 per cent., and the result is extremely gratifying—a good meal being eaten painlessly after their use, when previously water could not be drunk without pain. Insufflation of oxychloride of bismuth and morphia, and inhalations of the compound tincture of benzoin and oil of eucalyptus, also soothe. In order to keep the ulcers clean and promote healing, I like insufflations of iodoform, and inhalations of creasote and terebene.

Lastly, there are two new remedies which I have tried; viz., 20 per cent. solution of menthol in olive oil, dropped on to the parts. From this I cannot acknowledge to have derived much help; its pain-destroying and healing properties being, as far as my experience goes, very small and very transient. The other is lactic acid, of which I have used solutions of various strengths—at first 10 per cent., and gradually increasing to 70 per cent.; and I believe that it cleans the ulcers, and promotes healing and cicatrisation. It is apt to set up a good deal of spasm of the glottis, and I have been a little alarmed, once or twice, at the semi-suffocated condition into which patients have got, owing to this; otherwise I have experienced no trouble from its use. In one case, where there were a number of polypoid excrescences on the inter-arytenoid mucous membrane, its application in strong solution used to free the patient from pain, on swallowing and talking, for two or three days; and he always asked me to apply it on that account, as it seemed to render the parts almost anæsthetic, probably owing to a slight caustic action. It also did good in this case by decreasing the size of the elevations.

Scarifying of the infiltrated parts is practised by some

surgeons; but I have never seen any great advantage accrue from this, and it is certainly not devoid of the risk of setting up increased inflammation and ulceration.

Besides all these measures, of course the usual treatment of pulmonary phthisis must be gone on with.

In one case I saw necrosis of the right arytenoid cartilage come on, and was able to promote healing by clearing out the *débris* and stuffing the ulcer with iodoform; and although this patient has a small crater-like opening at the site of the formerly ulcerated ragged hole, and although the mucous membrane surrounding this opening is still swollen, there was no sign of the extension of the mischief when last I saw him, and I believe that removing the *débris* with a probe and using iodoform did great good in this case.

My cases of *acute laryngitis* showed the usual appearances on examination with the laryngoscope; viz., bright-red colour of the mucous membrane of the larynx, including the vocal cords, along with some swelling of these parts.

Two of them were in little children, in whom, owing to the small calibre of the throat, there is no small danger of suffocative attacks from mucus drying on the swollen parts. The usual treatment—viz., frequent hot poultices, steam inhalations of the compound tincture of benzoin, a very moist warm atmosphere, and warm drinks, along with salines and remedies to keep down the cough—soon cured the condition.

Besides the cases of *syphilis of the larynx*, which were associated with evident hoarseness or aphonia, I have seen others in which, along with secondary syphilis of the pharynx, there was an obstinate erythematous blush on the laryngeal mucous membrane; but this caused no

evident alteration of voice, and got quite well under the usual treatment.

Several of my cases of chronic laryngitis occurred in syphilitic people; but I see no sufficient reason for believing this to be other than a mere coincidence.

In one of my patients, along with extensive destruction of the epiglottis, there were gummata of various conditions on that cartilage, and by frequent laryngoscopic examinations I was able to watch these go through the various stages of deposition, softening, and ulceration. There was terrible pain on eating in this case, and after trying insufflations of morphia, I used cocaine; and the superiority of the latter drug over the former was most evident, the man being able to eat a good dinner in comparative comfort after its use.

In another case, along with aphonia there was evident laryngeal obstruction, the breathing being characteristically noisy; the mirror revealed large outgrowths of the mucous membrane of the larynx, in various positions, one of which, of the size of a small bean, was situated between the arytenoid cartilages, and so prevented the vocal cords coming into apposition on phonation, and thus destroyed audible voice. The mobility of the vocal cords in this case was greatly impaired and they were enormously thickened; in fact, I have never seen them so thick in any other patient.

I cauterised these outgrowths with chromic acid fused on the end of a probe, but found that whilst it removed pieces of them, it set up laryngitis, and so had to be discontinued. It was surprising how much good, in clearing the voice and also, by reducing the swelling, in allowing free and noiseless breathing, was caused by the use of iodide of potassium in big doses; and I

abandoned all local treatment, which seemed to do more harm than good.

In another patient there was scarcely any epiglottis left, owing to ulceration, and yet the man rarely got any food or liquid into his trachea, so great is the power of the parts—especially, I believe, of the ventricular bands—in adapting themselves to act as guards to the entrance to the larynx.

Here little could be done, except to alleviate pain by the measures already suggested, and I only mention the case in order to illustrate the danger in which such patients live—this man having been killed by swallowing a piece of bread and butter, and washing it down into his larynx with tea, death being caused by suffocation before a medical man, who was at once summoned, could come to his assistance.

In tertiary syphilis of the larynx, I have come to the conclusion that, beyond general antisyphilitic treatment, soothing inhalations, such as the compound tincture of benzoin, to keep down cough, and insufflations of iodoform, inhalations of creasote and eucalyptus to clean ulcers, and insufflations of morphia, or, still better, brushing and spraying the larynx with solutions of cocaine to keep down pain, little can be done; the need for tracheotomy, however, must always be kept in view.

Of the cases of *growths in the larynx*, four were innocent and one malignant. Of the four innocent growths, two were sessile papillomata; in both cases the warts were seated on the free edge of the left vocal cord, were multiple and spread over about one-third of the total length of the cord.

One case was that of a schoolmistress, who had been also teaching singing, whose larynx was necessarily ex-

posed to a great deal of work. From her history, she had evidently had chronic laryngitis for some time. From being hoarse, she became aphonic, and had been in that condition for some months before seeing me. With the laryngoscope I found a sessile irregular growth on the anterior third of the left vocal cord, her right cord, against which this growth pressed on phonation, being in a state of congestion. Seeing that the base of the growth was so large, I resolved to try local astringent applications. I began with one of chloride of zinc, grs. xv. to the ounce of glycerine, and increased the strength of this gradually up to grs. xxx. ad ℥j; very soon the aphonia gave place to hoarseness. This became less marked, and she resumed her occupation with a husky voice. I then used solutions of lactic acid, beginning with 20 per cent. and reaching 60 per cent. strength. This set up a good deal of spasm when applied with the brush; but the growth became much smaller, looked harder and less succulent, and her voice has so far returned and become clear, that she was offered a situation as head mistress of a Board school not many weeks ago.

In another similar case the chloride of zinc solution did me equally good service.

In two of my other cases the growth was distinctly pedunculated, looking like a small red currant attached to one of the vocal cords. Both were in people who use the voice a great deal—one a street hawker, the other a comic singer. The latter case is of extreme interest, as showing how chronic laryngitis leads to the formation of growths. This man consulted me at the Bristol General Hospital about eighteen months ago for hoarseness, and I found that he was suffering from chronic laryngitis. I painted his throat with astringents and so on, and he got

well. He then followed his "profession," which was that of singing in public-houses, and no doubt his larynx again became inflamed, and this led, as it will do in a certain number of patients, to growth-formation, probably papillomatous.

Both these cases were admirable ones for removal of the growths by forceps; but unfortunately both of them got alarmed at the prospect, and so in all probability have got their hoarseness and growths in their throats to this day.

The fifth case was of great interest, as it was epitheliomatous.

The patient, a man 47 years of age, came to me in March, 1886, having had pain on swallowing for five weeks, the pain shooting up to the left ear; his voice was deepened, and he had a hard lump as big as a hazel-nut below the left ear and another below the left jaw. On examination, there was some chronic pharyngitis and considerable congestion, and some swelling of the mucous membrane of the larynx on the left side. Looking to the presence of the hard enlarged glands about the jaw on the same side as the congestion of the larynx, I considered the case suspicious of malignant disease, as syphilis was denied, and the normal condition of the lungs, which I carefully examined, excluded phthisis.

The man got easier under treatment, and I did not see him again for seven months, and then he was sent to the Bristol General Hospital by Dr. Dowson, on account of great difficulty in breathing, which it was considered, and rightly so, might necessitate tracheotomy at any time.

I found the formerly congested part occupied by a ragged epitheliomatous growth; there was great increase in the size of the glands of the neck on the same side as

before, and the patient was in such a condition that I took him into the hospital. Here our House-surgeon, Dr. Newnham, had to do tracheotomy not long after his admission, and eventually the man died with malignant mischief of larynx, œsophagus, pleura, and liver.

The case is one in which I considered no operation would have been of much value, seeing that before the mischief was pronounced in the larynx, and before one could diagnose it definitely, the glands were infiltrated, besides which the operation must have been extirpation of half or of the whole larynx, and so of the severest character.

Thoracic Aneurism caused hoarseness in three cases which I saw: in one the right innominate artery was involved, in another the innominate and aorta, and in a third the exact position of the sac was doubtful, as there was no *post-mortem* examination. In each case the recurrent laryngeal nerve corresponding to the side on which the dilated artery compressed it was paralysed, and the vocal cord moved by the muscles which were set in action by this nerve was motionless on phonation.

The treatment in such cases is that of the aneurism; and in one case the vitality of the nerve was so far restored on removing the pressure exerted by a large right innominate aneurism, that as the sac got smaller, and the pulsation in it became less, the voice improved very much. The reason of the improvement could be seen, on laryngoscopic examination, to be due to the muscles supplied by the nerve recovering their power of approximating the vocal cords, and hence fairly clear voice resulted.

I have had two cases of *œdema of the larynx* under my care at the Bristol General Hospital: one was extraor-

dinarily acute, the voice being completely lost in an hour or two from the beginning of the attack. Only the epiglottis, which was enormously swollen, was affected. Under very hot poultices frequently renewed, hot steam constantly inhaled, impregnated with the compound tincture of benzoin, and careful avoidance of all draughts of air, and feeding on warm milk and beef-tea in small quantities and often, I saw the epiglottis get thinner and thinner day by day, and more and more of the glottis came gradually into view—the patient completely recovering. I hope to publish the case *in extenso*, as it shows that such patients get quite well without running the risk incurred by scarification of the swollen œdematous part, which would in my patient have been very dangerous indeed.

The other case, also under my care at the Bristol General Hospital, was one of œdema of the glottis, and also of parts below the glottis. Knowing that these cases of sub-glottic œdema are very often syphilitic, I put her on iodide of potassium, and on several occasions leeches were applied over the thyroid cartilage, besides which hot poultices, steam inhalations, and careful feeding were persevered with, and she got perfectly well, both as regards her voice, which when first I saw her was nearly gone, and also as regards the condition of her larynx as seen with the mirror.

Lastly, I wish to say how convinced I am of the importance of examining with the laryngoscope every case of pulmonary phthisis in which there is deepening of the voice, hoarseness, or aphonia, as I have found that in many of the cases the symptom depends merely on *anæmia ;* and the knowledge that this is so, has a bearing on the prognosis to which I need scarcely refer.

Clinical Records.

SOME INTERESTING CASES OF STONE IN THE BLADDER.

By J. Greig Smith, M.A., F.R.S.E., Surgeon to the Bristol Royal Infirmary.

(Read at a meeting of the Bristol Medico-Chirurgical Society.)

REMOVAL OF A STONE WEIGHING OVER NINE OUNCES BY THE SUPRA-PUBIC METHOD IN A PATIENT WITH SUPPURATIVE NEPHRITIS AND DISCHARGING EMPYEMA. DEATH ON THE TENTH DAY.

J. T., æt. 58, was sent to me with what was supposed to be caries of the ribs. His history was, that for ten years he had been more or less of an invalid, but that six months previously he had been taken seriously ill with a pulmonary trouble. After being very ill for some weeks, with great pain on the right side and difficult breathing, he suddenly coughed up large quantities of pus, and then he improved a little. Soon after, an abscess burst between the 7th and 8th ribs in the axillary line; and the sinus had continued open ever since, discharging large quantities of thick pus.

When I first saw him, he was so much exhausted after a long journey that a minute examination was impossible. However, the existence of dulness, hardness, and some œdema in the right loin, between the crest of

the ilium and the ribs, made me look to the kidney. I diagnosed suppurative nephritis: the pus having escaped from the kidney-capsule, burrowed its way upwards through the diaphragm into the pleura, and ultimately having burst through the lung. This diagnosis I communicated to his medical attendant. Pus in the urine, and frequent micturition, of which he informed me only after direct questioning, I thought might be accounted for in this way.

For a few days further examination was impossible, as he continued very weak and ill. A probe entered the sinus upwards for eight inches, and could be moved freely in all directions in the pleural cavity. I inserted a drainage tube, and put the patient on stimulating diet.

Questioned as to the possibility of stone in the bladder, he told me that he had had what his medical advisers (and he had had many) called an irritable bladder; that he had been frequently sounded, and no stone found; and that quite recently one of his medical men had been in the habit of washing out his bladder. He was certain there was no stone, and he begged me not to pass an instrument, as it gave him so much pain. He had never noticed blood in the urine.

The finger in the rectum soon settled the diagnosis. The first thing felt was a large stone, lying almost like a polypus in the rectum, and blocking its calibre. The bladder was evidently drawn out like a Florence flask, the stone occupying its fundus. A short-beaked sound, introduced point backwards and tilted upwards—in the directions reverse to the ordinary method—came in contact with the stone, but could not measure its size, on account of the contracted state of the bladder.

The diagnosis was now, that the stone had set up the

kidney trouble—that it was a backward nephritis. And, under all the circumstances, I refused to operate. I explained to him that the lithotomy alone would be a very serious operation for a man in fair condition, but that in his case it would almost certainly be fatal. And when the stone was removed, the suppurating kidney would require further operation; while as to the empyema, that also was a serious condition. I further explained that the administration of an anæsthetic to a man whose lungs were not sound was attended with risk.

The patient was not strong enough to return to his home, and he continued under my care. He had little sleep, being waked up every half-hour or less to micturate, and being kept awake for some time by the pain which followed micturition. At every visit he urged me to operate, if it were only to relieve him of his agony and give him a few hours' consecutive sleep. His medical man advised operation, and a friend and colleague who gave me the benefit of his opinion thought it right to operate. On October 12th, I therefore operated by the supra-pubic method.

The bladder was first washed out with boro-glyceride solution by means of an irrigator, the catheter being left in, attached to the irrigator tube. The rectal bag was then inserted, and distended with water. The ordinary dissection was rapidly made, and the recti partially divided near their insertion. When the bladder was exposed, the irrigation-reservoir was elevated a few feet, and the bladder was rapidly distended, while the peritoneal fold could be felt and seen to be carried upwards. When distension was sufficient, the irrigator was simply placed on the level of the bladder, ligation of the penis being quite unnecessary. A Lister's sinus-forceps was gently insinuated through the

coats of the bladder, and separated them; while by pulling the bladder-walls forward, they gave easy opportunity for the placing of two catch forceps at the sides of the opening. The opening was then enlarged, chiefly downwards, by scissors. The stone was first tilted on its side by the finger, and then extracted by long flat-bladed lithotomy forceps.

The wound in the bladder was attached to the upper extremity of the abdominal wound; bladder-wall, muscles, skin, and fascia being gathered together in the same sutures. It was not possible, on account of the extreme friability of the vesical tissue, to satisfactorily unite the wall of the viscus to the abdominal wound in its lower portion. A large drainage tube was placed in the bladder, and the patient laid on his side. The interior of the bladder was rubbed over with boro-glyceride, and the edges of the wound and neighbouring skin freely smeared with the pure material.

When the patient was first seen, a few hours afterwards, he was breathing with great difficulty, bronchial râles being audible all over the room, and for the first twenty-four hours his lungs seemed to get steadily more and more œdematous. Then, with the help of strong stimulating expectorants, he began to get up a little mucus, and for the first four days he greatly improved, sleeping almost constantly, and expressing himself as being delighted with the relief afforded. But about the sixth day the expectoration somewhat suddenly became more abundant and quite purulent. I judged that the old communication with the lung had re-opened. He could breathe only in the sitting position. In spite of every therapeutic means, his lungs got more and more laden with purulent material, and he died asphyxiated.

The wound had progressed most satisfactorily, never showing a sign of redness, and healing perfectly, all except a small sinus, through which clear urine trickled. He had begun to pass a little through the penis. It pained him scarcely at all, even during his prolonged fits of coughing. A better result, so far as the operation was concerned, could scarcely have been wished for; it certainly was not expected.

After the operation, the sinus in the side discharged less freely, in spite of free drainage; this also was in favour of the re-opening of the old pulmonary fistula. A *post-mortem* examination was not held.

This was the fifth occasion on which I had performed supra-pubic lithotomy; and nothing has impressed me so much with the excellence of this method as the local result in this case. Considering the size of the stone, and the nature of the enormously thickened and non-distensile bladder walls, the proceeding was peculiarly easy and rapid. In any case, it was the only feasible method. Crushing was out of the question, and perineal lithotomy, without crushing, would have been impossible.

Remarks.—I dare now to say in public, what I have always said in private, that perineal lithotomy is, in my opinion, a grand surgical error.

Ever since I have had an opportunity of performing a major operation, I have spoken against perineal lithotomy. A surgeon to a large general hospital for seven years, I have never operated for stone by perineal section. In every case where crushing was out of the question—and such cases are very few—I have performed the supra-pubic operation. This opinion I held before Bigelow came on the field: his advent has confirmed my practice.

I have often heard an excellent surgeon, now dead,

and much respected and admired by many of us, say that he had often to finish a colleague's lithotomies by curing their strictures or their fistulæ. Such sequences of lithotomy somehow seemed to gravitate towards him: he put it down to the mode of operating by the median method. Very possibly some one else will have to treat his cases done by the lateral method. It is certain that in each case the operations were as brilliantly performed, and the immediate results were as good, as surgical science and art could bring about. And yet only a few months ago, in our Infirmary, a colleague had to treat a case of perineal fistula (fortunately with success) for a patient on whom lithotomy had been performed by one of these surgeons some ten years ago. In my own comparatively limited experience, I have seen three cases of fistula, and four of urethral stricture, all following perineal lithotomy.

It is undoubtedly true that stricture, fistula, and sexual incompetence are by no means rare sequences of perineal lithotomy. A London hospital surgeon has recently said that in 200 cases in which he had performed perineal lithotomy, he had never known any of these results follow. I would venture to affirm that a written statement from each of these patients would give very different information. That the seminal ducts may be divided, and the urethra be cut, bruised, or torn, with impunity, is dead against all that we know of pathology, and physiology as well.

It was not, however, a consideration of these remote results which weighed so much with me, as the plain, palpable, straightforward fact, that in lateral lithotomy we sought a devious and dubious, not to say hap-hazard, mode of entrance into the bladder, when we had provided

a simple and straightforward one over the pubes. If the results from the high operation were worse than the results from the low, then I felt certain that this was because of some error in technique. If only one tithe of the anatomical study and description which has been spent on the perineum had been spent on the supra-pubic space, the result might have been different. It was terror of the peritoneum, probably, which drove surgeons from the supra-pubic operation. In respect of the operation in question, Lister was the first to dispel this terror; to him, without a doubt, must be awarded the merit of having re-introduced the supra-pubic method of lithotomy.

One of my most treasured possessions is a copy, dated 1722, of Cheselden's *Treatise on the High Operation for Stone*. To his abandonment of this operation, I trace the resumption of the lateral method by others. "Cutting on the Gripe," as the old Roman and Greek operation was called; dignified into a surgical procedure by the major operation of Marian in 1524; degenerated into semi-quackery by Frère Jacques in 1697, was, in its anatomical outcome, lateral lithotomy. Cheselden's fresh young ideas were theoretically correct; where he failed in practice, from ignorance of now ascertained principles of surgery, he took the intelligible course of following on a sound anatomical basis the palpably successful practice of ancients and quacks. The real inventor of the operation, Pierre Franco (1561), successful as he was, did not advise any one to follow him. Cheselden himself even, after writing such a treatise, and with his (for those days) complete knowledge of anatomy, abandoned it for the lateral method. And herein he followed his lights: he knew nothing of the germ theory; his vulnerary decoctions were aseptic, but not antiseptic; he did not know

how to avoid the peritoneum in operating; and he knew not how to protect the supra-pubic wound in the after-treatment. Had he known these things, he would never have abandoned the practice of those years when his intellect was at its best, and his hands were most skilful.

Anatomy rose in the schools, and the perineum was dissected and described in all its intricacies of muscles, fasciæ, arteries, and nerves. But all this dissection and description could never make lateral lithotomy more than a stab in the dark, or at best a cutting by rule of thumb —or, if you like, by guidance of staff and forefinger. Now this is fortuitous surgery. True, in children at least, the chances have been highly favourable, the recoveries have been numerous, and the immediate results favourable. But we ought to take congnisance of remote results. And this is now being done. Incompetence, stricture, and even perineal fistula, must be counted among the possible results of lateral lithotomy.

In the supra-pubic operation, the recovering patient is well, not only after the operation, but for ever afterwards. He has nothing to dread. The seminal ducts are intact, the membranous urethra is undivided. The bladder-scar is in an area remote from urethra and seminal duct, and it causes no harm whatever. If its immediate mortality at all closely approaches that of the perineal operation, the supra-pubic is the preferable. At present it is quite as good, and the rapidity of recovery is greater. In the future I have no doubt whatever that, where crushing and immediate evacuation of the stone is out of court, supra-pubic lithotomy will uniformly take the place of the perineal operation.

In the operation of supra-pubic lithotomy, I think we have made in the last few years of its revival several

notable advances. Foremost among these I would place suturing of the bladder in children. In quite a considerable number of cases primary union has been obtained, and in the great majority union has been complete within three weeks. In old people, and in cases of very large stones, supra-pubic drainage is, I think, advisable. But, even in these, healing will be accelerated by partially suturing the opening; and more particularly by suturing the bladder-opening in the stitches which close the abdominal wound.

The second advance is the rejection of the catheter placed in the urethra. I am sure that twice in young patients of mine primary union was prevented by over-distension of the bladder, caused by blocking of the catheter during the night. But the fistula which formed was small, and healed up more quickly than does the perineal wound in lateral lithotomy. I had several times discussed the advisability of doing without the catheter, and had decided to try the experiment, when Mr. Barker's success solved its feasibility. Other cases have proved the wisdom of his recommendation—one of them in my own practice.

As to the rectal bag, my mind is not made up. In the removal of a very large stone I do not think I should again use it, but should prefer instead the fingers of an assistant in the rectum, which would push the stone up to, or out of, the wound. And in such cases the bladder tissues are so friable that rectal distension might damage or even tear them. In children the bladder lies naturally high, and I doubt if the rectal bag does much good. It steadies the parts, and, when the bladder is opened, it keeps forward the posterior wall, and brings it within easy reach of the finger. In the removal of

bladder-tumours I have found that, on these grounds, the rectal bag is very useful.

What has usually been claimed as the chief advantage of the rectal bag, namely, increasing of the supra-pubic interval, I should regard as the least. A little experience of peritoneal surgery soon teaches us how to recognise and push up that membrane in epicystotomy. The advantage of increasing this interval, at least, is only momentary: when the bladder collapses, after being opened, the increase of the interval is lost. Then the whole end may be attained by pushing the peritoneum inwards on the abdominal cavity.

CASE OF CALCULUS IN URETHRA WITH CALCULUS IN BLADDER IN A GIRL EIGHT YEARS OLD.

The patient, a girl of eight, but small for her years, was admitted to the Bristol Royal Infirmary on Jan. 8th, 1887, suffering from incontinence of urine. Every quarter of an hour or so she tried to pass water, but most of it dribbled away in the intervals. There was considerable pain, with marked tenesmus. The urine was often stained with blood, and blood was seen in the evacuations. On Jan. 14th the child was put under the influence of chloroform. A probe passed into the bladder struck a stone of considerable dimensions. It was noted at the time that the urethra was long and rough, apparently coated with phosphates, but urethral calculus was not diagnosed.

On Jan. 17th I proceeded to remove the calculus through the urethra. A small incision was made by

scissors on the under surface of the urethral orifice, and the canal behind was dilated with a Lister's sinus-forceps. During dilatation I was surprised to find a stone in contiguity with the forceps, which was at once and easily extracted. I concluded that this was the stone in the bladder, and that the urethra was very short. Its curious shape (as shown in the drawing, made to scale) and the existence of a facet on its surface suggested the existence of another stone. I pushed my little finger, which was as large as the parts would admit without risk of laceration, and was able to feel at its tip a small opening: a probe pushed through this opening at once came upon a stone which was evidently closely embraced by the walls of the bladder, as in a saccule. I cautiously dilated this opening with the finger sufficiently to admit the introduction of a polypus-forceps, and by conjoined manipulation through rectum and over pubes endeavoured to place the stone between the blades. After several ineffectual attempts the stone was caught, but it could not be extracted through the small opening without tearing it. I therefore crushed it with a small lithotrite, and proceeded to remove it piecemeal. This proved to be a difficult and delicate proceeding. The sac in which the stone lay (in reality the contracted bladder) was not in a line with the urethra, but behind and below it; no instrument could be found with a curve sharp enough to enter it through the urethra. Washing out the fragments with a Bigelow's apparatus was also found impracticable. Most of the fragments were removed between the tip of the little finger and a small scoop, while a finger in the rectum pushed the bladder forwards. The smallest fragments were finally washed out. The very small size of the parts, and their delicacy and friability, made it imperative

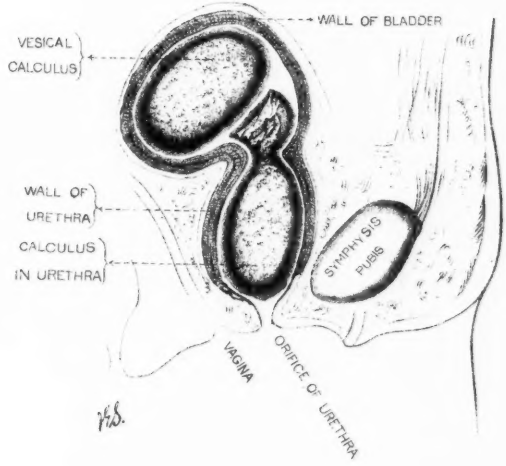
that all proceedings should be carried out with extreme gentleness.

The patient took the anæsthetic very badly; shortly after the commencement of the operation she had a well-marked epileptic fit.

The patient made an uneventful recovery. By Feb. 2nd she had recovered complete control over the bladder, and three days later she was discharged well.

Remarks.—Not till the operation was over and the calculi carefully examined did it strike me that this was a case of combined urethral and vesical calculus. The shape of the calculus first removed, and the polished facet on the knob which sprang from its inner extremity, showed that it had been partly encapsuled, and that a second stone rubbed against the knob which protruded from the saccule on which it rested. That this stone lay in the urethra I have now no doubt. It lay quite close to the orifice of the urethra; and the urethral canal had been gradually distended and elongated by the growing stone, so that the neck of the bladder was pushed some distance backwards. It was coated with epithelial *débris* and mucus, and the probe first used in sounding the stone glided easily over it without producing the characteristic sensation.

So firmly was the bladder contracted around the second stone that sacculation was at first diagnosed. The stone could be readily palpated between the finger in the rectum and the hand over the pubes, but from the continued straining and struggling of the child (profound anæsthesia at once induced alarming symptoms) it slipped from the grasp in the most aggravating way. And when forceps had gripped it, it was simply impossible to pull it through the narrow orifice at the neck of


WALL OF BLADDER
VESICAL CALCULUS
WALL OF URETHRA
CALCULUS IN URETHRA
SYMPHYSIS PUBIS
VAGINA
ORIFICE OF URETHRA

the bladder, dilated as it had been by the finger. It was necessary to crush; and to remove the fragments one by one through the narrow opening without causing injury to the delicate tissues, was one of the most tedious and difficult surgical operations in which I have been engaged, Much time was wasted in attending to the dangerous symptoms arising from the anæsthesia; the whole operation occupied the greater part of an hour.

(To be continued.)

A CASE OF TUMOUR IN THE ORBIT.

By F. Richardson Cross, M.B. Lond., F.R.C.S.; Surgeon to the Bristol Eye Hospital, Ophthalmic Surgeon to the Bristol Royal Infirmary.

The following case is unusual in its clinical history. I am of opinion that it is not any form of gumma, nor a hydatid; it can scarcely be looked upon as inflammatory, though its histology is probably similar to granulation tissue-formations. There can be no longer any suspicion of its malignant nature.

Thomas G., aged 35, in 1884 was "out of sorts," and was able to take very little exercise. He considers that his illness commenced with a chill taken during his work in a newly-built washhouse. His health varied for a few weeks, when he suddenly became very much worse. He suffered frequently from severe chills, amounting to rigors. He lost flesh; was very languid and tired; but managed to struggle on with his work as a shoemaker. He sometimes noticed a weakness of his right eye, which seemed liable to styes.

Dropsy then showed itself in the legs, gradually passing into the body and face. For a week he was scarcely able to breathe, propped up with pillows; but he was able soon after to resume his business.

At this time he noticed toothache and neuralgic pains in the right side of his face, a peculiar numbness of the right cheek at meal times, and stiffness of the upper jaw, as though it did not belong to him. He had also a peculiar pinched-up, contracted feeling of the lower lid, nose, and cheek. There was evidently pressure upon the trunk of the superior maxillary nerve; right.

After the dropsy subsided, both lids remained swollen. He was next seized with a most acute pain on the right side of the apex of the head, specially marked at one spot, where it seemed to perforate the skull; it was accompanied by severe neuralgia of the nose and forehead, which resisted all treatment (ophthalmic nerve). Double vision was then noticed, till the lid of the right eye began to drop and covered the sight (motor oculi).

About six weeks from this time he discovered, on raising the lid, that the right eye was quite blind; and he went to the Bradford Eye Institution. Here it was observed that there was a considerable submaxillary swelling on each side, especially right. No prominence of the eyeball was noticed. Galvanism produced no effect on the ptosis. There was absence of sensation on the forehead, upper part of the head and cheek, on the right side. His head felt very heavy on the pillow, and there were severe pains on both sides of the neck, as well as acute pain in the face and head. The ear was not affected, nor the lower jaw, except mechanically by the submaxillary swellings. He had taste, but he could not enjoy his food.

A fortnight after reaching Bradford, the eye was noticed to protrude. He remained there two months, and when he left he could not close the lids over the globe. He says the tumour was considered to be malignant at the base of the skull, pushing forward the eye.

After a short time he came under the care of one of the surgeons in the Leeds Infirmary. At the commencement of 1885 the eye was continuing to protrude, and was now itself the main seat of the pain. There was a large red mass over the lower lid (conjunctival chemosis), and there was tremendous swelling under each jaw. The surgeons had differences of opinion as to the character of the disease, and no special treatment was adopted for about a month. He was then most energetically treated by mercurial medicines and inunctions; by it his teeth were loosened and his mouth ulcerated: he could take nothing solid for five weeks. He says, whilst he was in the Leeds Hospital he became totally blind, but the sight soon returned to the left eye. The proptosis of the right became more marked, and the eye seemed to lie out upon the cheek. Three months after his admission, removal of the eye was recommended, and would have been done, but that his surgeon fell ill and the patient went home for a change. He says that nothing gave way, but that the swelling gradually subsided *without discharge*, so that when he returned to the hospital they scarcely knew him. He had been living mainly on suet and milk. After re-admission at Leeds, the lids were sewn together with silver wire, in order to protect the cornea, which was becoming cloudy. He admits that at this time there was so much discharge that it required syringing out, and attributed it to inflammation of the eye resulting from the stitches. He seems certain there was no discharge from the eye

before. (Had the discharge commenced in the fortnight he was at home, the subsidence of the swelling would be explained by suppuration of part of the neoplastic tissue.) The stitches were removed from the lid at the end of three weeks, and the cornea had improved. He remained an out-patient at Leeds for two months, taking iodide of potassium.

In the middle of 1885 he came under my care in the Infirmary, Bristol. He was very thin and pale. He denied any history of syphilis, and said that mercury always did him harm, but that he felt better when taking iodide of potassium. All his organs were healthy; there was no anasarca. The left eye was quite healthy; the right was prominent, but could be completely covered by the lids, which, however, opened very imperfectly. The elevator was not paralysed. There was a distinct hard non-pulsatile nodule, as large as a nut, along the lower floor of the orbit, which pushed up the eye and was lost in swelling of the conjunctiva, which was very injected and swollen over it. The eye was only capable of the slightest movement in any direction; the cornea showed leucomata, but was not inflamed. There was a slight but definite fulness below the malar bone and zygoma, and above the zygoma in the temple; but the movements of the jaw were not impaired. There was evidently a growth in the spheno-maxillary fissure, causing œdema merely of the temporal and pterygoid regions (for there was no impairment here of nerve or muscular function), surrounding the optic nerve and muscles of the eye, and passing forwards along the anterior extremity of the fissure to the lower wall of the orbit; but the pathology of the growth was uncertain.

I still have the case under observation. The swelling

has gradually subsided, but at uncertain times it varies in size. Partial anæsthesia of the implicated nerves still remains, and there is no movement of the eye. For some time there has been no pain. From what I have observed of the growth under anti-syphilitic remedies, I feel sure it is not syphilitic, and the man has never shown any other symptom of this disease. I have never trusted myself to make an incision along the tumour, which is still as large as a nut at the lower wall of the orbit; but I sometimes feel uncertain if it is a hydatid, and I should be glad of an excuse for an exploratory incision. The eye is perfectly blind with atrophy of the disc, seen with difficulty through hazy media.

I may add that on October 21st, 1886, Messrs. Critchett and Juler exhibited a case at the Ophthalmological Society, resembling this one in many respects. I mentioned my case at that meeting, but it has not before been published as I was anxious to keep it longer under observation.

Reviews of Books.

Electrical and Anatomical Demonstrations. Delivered at the School of Massage and Electricity, Welbeck Street, London. By HERBERT TIBBITS, M.D. A Handbook for trained Nurses and Masseuses. London: J. & A. CHURCHILL. 1887.

The development of the profession of Massage and Electricity demands new text-books for the use of those intending to follow these new avenues to employment. Dr. Tibbits has printed the lectures which he delivered at his hospital to those studying the application of electricity to medicine, and has thereby provided a book which will prove of great use. The various forms of battery and varieties of electricity are clearly explained, and illustrated with good diagrams to render the text more intelligible to those who have not had the advantage of attending his demonstrations. In a separate chapter there is also given a sketch of human anatomy so far as it is requisite for the intelligent use of electricity in medicine. Dr. Tibbits' audiences were composed partly of medical men, as well as of lay-students; so that the book is well worthy of perusal by all practitioners. Hitherto there have been obtained no great therapeutical results from electricity by members of the profession generally; this largely depends upon their imperfect understanding of electrical apparatus and its application in the treatment of disease, a defect which this book can do much to remedy.

Elementary Practical Biology, Vegetable. By THOMAS W. SHORE, M.D., B.Sc. Lond., Lecturer on Comparative Anatomy at St. Bartholomew's Hospital. London: J. & A. CHURCHILL. 1887.

For those who are about seriously to work in the laboratory at the acquirement of the knowledge of the structure of the various types from the vegetable kingdom, required by

the London University in its examination in Elementary Biology, Dr. Shore has provided an excellent manual. It is thoroughly practical, thoroughly scientific, and thoroughly trustworthy, and will prove the best-arranged existing guide to the student who is devoting his attention to the study of Practical Vegetable Biology—that is to say, to the structural anatomy of plants, both coarse and microscopical; for though the term biology carries with it a physiological suggestion, of physiology proper there is almost nothing. In order that the book may not be used for the purposes of "cram," Dr. Shore has avoided the insertion of all illustrations or even diagrams: this exalted moral position will be wholesome in its influence upon the students, but had Dr. Shore pandered a little to popularity in this direction, the book would have appealed more warmly to those botanists who are not students preparing for examination. May, however, the author's virtue meet with the reward it deserves!

Short Sight, Long Sight, and Astigmatism: An Elementary Guide to the Refraction of the Eye. By GEORGE F. HELM, M.A. Cantab., M.D. London: J. & A. CHURCHILL. 1886.

This book is intended to serve as an introduction to more advanced manuals on the same subject. It discusses the passage of rays of light through lenses. The method of using test-lenses in the different errors of refraction to which the eye is subject, is dealt with in an easy and practical manner, considerable space being allotted to astigmatism.

There are thirty-five diagrams in ninety-seven pages; the book is thus made easy for beginners. The subject matter is arranged in logical sequence, and what is stated is correct.

There is a great deal, however, that is left unsaid, and, taken by itself, this book can scarcely be recommended as providing the student or practitioner with a competent guide in refraction-cases.

The Surgical Disorders of the Urinary Organs. 3rd edition. By REGINALD HARRISON, F.R.C.S. Pp. 583. London: J. & A. CHURCHILL. 1887.

The third edition of Mr. Harrison's valuable and popular work has been entirely re-written, and has been enriched by the addition of much new matter. In the department of

surgery covered by these lectures the author holds a very high reputation, and we may justly look upon any work from his pen as representing the highest level of excellence to which the surgical treatment of Diseases of the Urinary Organs has attained. But the work before us is more than this. It is personal in the best sense of the word; not only as embodying the teachings of an extensive experience in the ordinary paths of practice, but as breaking new ground, and devising original and ingenious plans of treatment. Mr. Harrison is also a diligent student of current literature, and on every page gives happy illustrations, from the most divergent sources, of some theory he desires to illustrate or some principle he wishes to enforce.

The style of writing is most captivating. It is clear, fresh, unaffected, and always to the point. We know of no recent surgical work whose perusal is likely to give the reader more profit and pleasure than this one.

Inoculation for Rabies and Hydrophobia. A Study of the Literature of the Subject. By Surgeon-General C. A. GORDON, M.D., C.B. Pp. 127. London: BAILLIÈRE, TINDALL, and COX. 1887.

We are in doubt whether this is seriously intended as a scientific work. The author describes it on the title-page as a study of the Literature of Inoculation for Rabies and Hydrophobia. Now evidence may be collected from the student in the workshop, or from gossip in the market-place. Our author has chosen the latter source. The literature studied and quoted is that ordinarily found on the table of the reading-room of a London Club. We have quotations from *The Times* and *The Field*—these have some weight; and we have extracts from *The Standard*, *The Morning Post*, *The Telegraph*, *The Chronicle*, *The Daily News*, *The Spectator*, and *The Evening Standard*—these we can tolerate; but what shall we say of the value of scientific evidence culled from *The Globe*, *The World*, *Vanity Fair*, *The Referee*, *The Zoophilist*, and (save the mark!) *The Pall Mall Gazette?*

With the exception of *The Medical Press and Circular* and *The British Medical Journal*, modern scientific journals have been almost ignored. We must therefore decline to regard this work as a "study of the Literature of the subject of Inoculation for Rabies and Hydrophobia," and, as scientific men, disregard conclusions derived from unscientific sources.

We fully believe that Surgeon-General Gordon is actuated by the best of motives, and that he may honestly "disclaim all partizanship in reference to the question he endeavours to elucidate, further than what is justified by the data to which he has had access" (Preface). But the data to which he has had access are not the accessible data.

The Throat and its Diseases. By LENNOX BROWNE, F.R.C.S.E. Pp. 614. 2nd edition. London: BAILLIÈRE, TINDALL, and COX. 1887.

As compared with the first edition, which has been out of print eight years, this second one is practically a new work. In its present form the book may be regarded as a complete exposition of the Diseases of the Throat from a pathological as well as from a clinical and therapeutical standpoint. The arrangement and subdivision of matter are admirable. A few introductory chapters are given on the Anatomy, and the examination of parts; on General Semeiology and Therapeutics, and on General Pathology. Then follow careful systematic descriptions of the Diseases of the Pharynx, the Uvula, the Tonsils, the Larynx, and the Nasal Passages. While the Pathology, the Etiology, and the Semeiology are treated with sufficient fulness, and with admirable balance and judgment, most praise must be bestowed on the parts devoted to treatment. Here the author speaks out definitely and clearly from convictions begotten of a large and well-utilised experience. And everywhere throughout the work there are evidences of extensive study, close reasoning, sound judgment, and skilful practice. Clearly the work must at once take a leading, if not *the* leading, position among works in the English language on Diseases of the Throat.

Not the least valuable part of the work is its illustrations. Nearly all of them are the author's own work, either drawn on wood, or reproduced by photo-gravure from pen-and-ink sketches, or drawn on stone. Fifteen plates of admirable lithographs, representing in a lifelike manner the most varied diseases, provide the student with a wealth of illustration which is positively luxurious. And these plates are so bound in the volume that any one of them can be unfolded and laid open to view while the letterpress is being perused. Indeed, the whole get-up of the work is such as to reflect the greatest credit on all concerned in its production. It is easy to foretell for it an extensive sale and a wide usefulness.

A Treatise on the Animal Alkaloids, Cadaveric and Vital; or, the Ptomaines and Leucomaines Chemically, Physiologically, and Pathologically Considered in Relation to Scientific Medicine. By A. M. BROWN, M.D. With an Introduction by PROFESSOR ARMAND GAUTIER. London: BAILLIÈRE, TINDALL, and COX. 1887.

On the Animal Alkaloids, the Ptomaïnes, the Leucomaïnes, and Extractives, in their Pathological Relations; being a short Summary of Recent Researches as to the Origin of some Diseases by or through the Physiological Processes going on during Life. By SIR WILLIAM AITKEN, Knt., M.D., F.R.S. London: H. K. LEWIS. 1887.

In the first book, Dr. Brown gives an able exposition of the researches on this subject from the earliest to the latest, with the intention of bringing before the English scientific student the many problems that these discoveries of animal alkaloids raise. The work opens with a lucid introduction by Professor Gautier, to whom the credit of being the first to discover the presence of these alkaloids in putrefactive albuminoid material is due. Shortly afterwards Selmi, the Italian medico-legal expert, found in the bodies of two persons, supposed to have been poisoned, an alkaloid hitherto unknown. It is not surprising that the announcement that organic toxic alkaloids, analogous to those of vegetable origin, were constantly formed during the processes of putrefaction was at first received with astonishment and even incredulity; but the subsequent researches of MM. Gautier, Pouchet, Hugounenq, and other observers successfully disposed of the objections raised.

The first part of the book gives an account of the methods of preparation, chemical properties, classification, and definitions of the ptomaïnes. As to their physiological actions, some are intensely toxic, one base being almost as powerful as the venom of cobra di capello; others are non-poisonous.

The last chapter of this part is occupied with a discussion of the measures to be adopted for determining whether an alkaloid extracted from the dead body—for instance, of a subject supposed to have been poisoned—is a ptomaïne, that is to say, has been elaborated during the process of putrefaction, or is a vegetable alkaloid introduced during life.

Obviously, to determine this with certainty is of paramount importance in medico-legal investigations.

The discovery of the ptomaïnes was followed by the detection of alkaloids in the urine, and then as a normal product of proteid metabolism; to these alkaloids, having an albuminoid origin in normal tissue transformation, Gautier gave the name of leucomaïnes: in the second part of the book these are treated of, so far as our present knowledge allows, in the same complete manner as the ptomaïnes. Since many of these leucomaïnes are highly poisonous—it has been calculated that the alkaloids contained in the twenty-four hours' fæces of a healthy man are sufficient to kill him—we accordingly find that there is abundant provision for their destruction and excretion. They are destroyed by oxygenation in the blood, and excreted through the emunctories. The recent experiments on peptones show that the liver especially has for one of its functions the destruction of harmful products of albuminoid metamorphosis, and the prevention of their entrance into the general circulation.

We can see how fruitful in the production of disease the ingestion of these bodies may become, and that the danger may be from within, an auto-infection, or from without, through unhealthy surroundings or bad food, &c. M. Peter considers that there is a group of symptoms produced by auto-infection from accumulation of the extractives in the system, especially produced by over-fatigue, and this "fever of over-taxation" forms the lowest member of a series which typhoid and typhus fevers complete. In other words, this "auto-typhusation" may occur in a more virulent form than as a mere "fatigue-fever," and may then be communicable to others. Space will not allow us however to enter into a discussion of the many interesting questions raised in the third part of the book, which deals with the relation of the ptomaïnes and leucomaïnes to scientific medicine.

Both Dr. Brown and Sir William Aitken vigorously attack those who uphold the view that the virus of many of the specific diseases is a micro-organism. Although diseases such as rheumatism, gout, and perhaps cholera are most satisfactorily explained by an auto- or hetero-infection from alkaloids, the relation of a micro-organism as the cause of others—it may be through products of the metabolism of these microbes—is too firmly established to be overthrown without further evidence. We do not think that the average medical man will echo Professor Aitken's joy at the prospect of being delivered from the hands of the bacteriologist into those of the expert in the chemistry of the alkaloids; the former's yoke has been

grievous, but at least rods of various colours are more entertaining than pages of bewildering chemical formulæ.

Dr. Brown's volume concludes with a bibliography brought up to date. We do not like to find fault with so excellent a book; but if the author had given more care to the composition of his sentences, much slipshod writing would have been corrected.

Sir William Aitken's book can be cordially recommended to all who wish to have an accurate account in small compass of the recent discoveries of animal alkaloids. It consists of two lectures delivered to his class at Netley, with the object both of acquainting them with the existing knowledge of the subject, and of stimulating them by their own exertions to further extend it. In a clear and concise manner, Professor Aitken admirably brings together and compares the work of the chief observers, while at the same time, far from being a mere abstract, his writing is full of original ideas and pregnant suggestions, and of well-reasoned argument founded on facts and theories both new and old.

Notes on Preparations for the Sick.

Report on some Meat-Extracts.

We have recently enquired into the dietetic and medicinal value of the following preparations :—

Valentine's Meat Juice.
Murdoch's Liquid Food.
Bush's Bovinine.

The first of these, **Valentine's Juice,** is now a well-known and much valued restorative in conditions of great exhaustion. It is a fluid of a blood-red colour, having ·04 per cent. of the amount of colour in blood: it is of syrupy consistence, readily soluble in water, of neutral reaction, and perfectly free from sediment. Its spectrum gives two lines, one on the *E* side of *D*, the other on the *F* side of *E*, answering to the characteristics of hæmochromogen (Stokes's reduced hæmatin). It contains coagulable albumen in solution amounting to about 7.0 per cent.; nitrogenous extractives soluble in alcohol, 11.6 per cent.; matters insoluble in alcohol, including inorganic salts, about 9 per cent.; and water 72.4.

Summary :—

Water	72.4
Coagulable Albumen	7.
Salts and Extractives	9.
Extractives Soluble in Alcohol . .	11.6
	100.0

The aqueous solution has an agreeable taste, little digestion is necessary, and its composition shows that its value for blood-making must be very high. A fluid with seven per cent. of soluble albumen is something more than a mere stimulating restorative; it supplies available nutriment for blood-making in an easily assimilated form. Few patients dislike it, and these dislike all other similar foods for the sick: we have found it to be of the highest dietetic value, and it may be well spoken of as the most perfect of beef-preparations.

Murdoch's Liquid Food is a blood-red fluid, containing much granular sediment, of crystals and disintegrated blood corpuscles; its reaction is neutral, and its specific gravity is 1030. Its spectrum shows one thin distinct line on the *C* side of *D*, and a broad fainter line on the *E* side of *D*, corresponding nearly to that of hæmoglobin, except that the *D* line is too near the red end of the spectrum. The amount of colouring matter is .20 that of blood. It contains 15.6 per cent. of coagulable albumen, and only traces of nitrogenous extractives and salts.

Summary:—

Water	83.4
Coagulable Albumen	15.6
Extractives and Salts insoluble in Alcohol	.4
Matters Soluble in Alcohol	.6
	100.0

Analysis and physical examination show it to be a solution of hæmoglobin with much insoluble granular sediment. In comparison with the Valentine juice it has a larger proportion of water and more than twice the proportion of soluble albumen, but with a great deficiency of extractives and salts.

This large proportion of albumen should give it a very high nutritive value, but it has less of the stimulating restorative effect in proportion to the relatively smaller amount of nitrogenous metabolites and salines. Such a solution of hæmoglobin with soluble albumen ought theoretically to be the best of blood-making nutriment, and experience shows it to be so, when the patient is able to take large quantities of the fluid: the colour, smell, taste, and after-effects of the fluid are however so nauseating and repulsive to most patients that few can be persuaded to persevere with it long. We have tried it in various forms: it is most readily taken in beef-tea, but the medicine-bottle in combination with liquorice and chloroform-water has been the most satisfactory method.

In the treatment of anæmia we have sometimes been successful: in one case the hæmoglobin rose from 45 to 60 per cent. in the course of fifteen days with first one drachm and then two drachms of Murdoch's Food every four hours: the convalescence was however much more rapid after sulphate of iron was given. In another case the hæmoglobin continued steadily at 30 per cent. for a whole month in spite of two-drachm doses every four hours, whereas within two weeks after the commencement of sulphate of iron the hæmoglobin had risen to 65 per cent.

It has been said that four tablespoonfuls daily will make eight per cent. of new blood weekly: our experience has not been quite in accord with this; it certainly is inferior to iron in hæmatinic value, but nevertheless it has potent dietetic and medicinal properties which ought to be, and are often found to be, of the greatest value. One patient found that she could not get on without it, and frequently had to resume her "Murdoch" after discontinuing it. It has been in the malnutrition of infants we have been most successful with this food. Even where peptonised milk and other prepared foods seemed to be failing, the addition of five or more drops to the milk at each administration has several times been followed by almost immediate improvement and steady recovery.

There is certainly scope for improvement in the preparation of this so-called "Food." True, it may be a typical food for the rectum, and we have frequently given it peptonised with milk by enemata; even then it should not be prepared in the room, as the odour is so disgusting. But the mere sight of the thick muddy-looking blood-red fluid is sufficient to raise a prejudice against it, which the removal of the cork will only intensify.

Bush's Bovinine is a dark-coloured liquid containing little sediment; the amount of colouring matter, estimated by the globinometer, being .20 that of healthy blood. Its spectrum gives a well-marked band at *C*, with a fainter band at *D*, resembling that given by an alkaline solution of hæmatin. The fluid is neutral in reaction, and contains 18.2 per cent. of coagulable albumen. The nitrogenous extractives insoluble in alcohol, and including the inorganic salts (phosphates, sulphates, and chlorides of potassium, sodium, and calcium), amount to .6 per cent. The nitrogenous extractives soluble in excess of alcohol amount to .45 per cent.

Summary:—

Water	80.75
Albumen	18.2
Inorganic Salts	.6
Nitrogenous Extractives . . .	.45
	100.00

Its analysis shows it to have a high potential value as a nutriment for the sick: less stimulating than the "Valentine," more nutritious than the "Murdoch," whilst its appearance and odour are superior to the latter, and patients take it more readily. A fluid containing one-fifth of the colouring matter of

blood, with eighteen per cent. of soluble albumen, and one per cent. of extractives and salines, ought to be excellent material from which to manufacture new blood. The digestion of such a fluid appears to take away from its apparent value, inasmuch as the hæmoglobin is decomposed and the hæmatin passes through the intestine in an insoluble condition; nevertheless, we are inclined to think that this fluid is likely to become better known and more extensively employed than at present: its dietetic value is undoubtedly great.

Pharmaceutical Preparations. BURGOYNE, BURBIDGES, CYRIAX AND FARRIES, London.

Moxon's Effervescent Magnesian Aperient is said to be decidedly the most agreeable purgative ever offered to the public. Possibly a mere sight of the label and the paper in which the bottle is wrapped might have the desired effect: should this fail, the effervescing powder forms in water an agreeable drink, which by its antacid, febrifuge, and aperient qualities must frequently be of service in a great variety of functional disorders where a saline aperient is indicated.

Dr. Koch's Meat-Peptone.—This preparation appears to be one of the most satisfactory of the numerous attempts hitherto made to peptonise the albuminous constituents of ordinary food. The product is put up in jellied form, also in tablets and in lozenges. It is quite soluble, dissolving readily on the tongue; has an agreeable taste, and great nutritive value. It must be easily absorbed and assimilated, whether given by mouth or rectum; and as it requires no digestion, must be of value where the digestion is impaired, or as a rapid restorative for travellers and others who cannot obtain regular nourishment. A box of the meat-peptone-lozenges, containing 25 to 30 grammes, will contain sufficient for a day's journey without other nourishment.

Hazen Morse's Maltopepsyn.—This preparation is a combination of pepsine, pancreatine, acid lactophosphate of lime, and dried extract of malt. It therefore combines the action of the digestive juices of the salivary glands, stomach, and pancreas; and is said to be capable of digesting all aliment taken by mankind.

The saccharated pepsine is that from the pig, freed from mucus and all impurities; and the malt extract is made from Canada barley, carefully selected, and which has the deserved reputation of being the best barley in the world.

The combination is agreeable to the palate, odourless, active, stable, and inexpensive.

Peptoleine.—This is the name given to one of the many emulsions of cod liver oil, which are provided for those who find a difficulty in taking or digesting the oil in the unmixed form. It is one of the most palatable of these combinations, has little of the unpleasant taste of the oil, leaves little after-taste, is readily miscible with water or milk, is easily digested, is said to be of equal nutritive value to the undiluted cod liver oil, and contains fifty per cent. of the latter.

We have also received from this firm a **Semple's Atomizing Inhaler,** which is described as the most perfect apparatus that has ever been presented for the treatment of diseases of the respiratory tract by medicated vapour.

It consists of an atomizer, working inside a chamber, which forms a reservoir, in which the fine spray is retained, and from which it may be drawn into the respiratory tract at will.

"From a study of the above cut, it will be seen that Semple's Atomizing Inhaler consists of a glass container covered with a metallic plate, to which is attached a cork stopper. Into

this is inserted a metallic tube for inhalation, with a bulb attachment for insertion into the mouth or the nostrils. A pendant disk is supported from the cover by two tubes; one, the air tube, passes through the cover and disk and is open from end to end. The other is closed at the bottom and passes through the cover, the portion exterior to the container being bent as indicated, and having attached to it a rubber tube with syringe bulb. Branching from the tube is a small tube closed at its outer end and having a small orifice on top, and just in front of and at right angles to a similar orifice in the end of the bent tube *f*. These two tubes are soldered together for mutual support, and the latter passes loosely through one of the holes in the disk, and extends to near the bottom of the container. This tube is attached to the disk on one side of the hole through which it passes to strengthen the parts.

"For using the inhaler, place enough of the desired inhalant in the bottom of the jar to cover the lower end of the tube *f*, taking care that the pendant disk is not submerged. By compressing the bulb air is forced through the connected tubes and discharged through the jet orifice, which, by means of the relation of parts shown, will draw the medicine through *f* and vaporize it in the chamber above the disk, from which chamber the patient may inhale the vapour through the tube. If preferred, the apparatus may be operated by removing the bulb attachment and connecting the metallic tubes by a rubber tube, with a reservoir of compressed air.

"It will be seen that all the mechanism is attached to and supported by the cover, and may be removed from the container by removing the cover."

A great variety of formulæ may be employed; but in preparing these it should be remembered that it is always necessary to add oil or glycerine or some body of similar consistency, in order to secure a vapour of sufficient permanence and density to resist rapid condensation. Some of the formulæ which have been found to answer well are as follows:

℞. Tinct. Benzoin. Comp.
Glycerini
Alcoholis aa ʒi—Misce.

℞. Ol. Picis Liquid. ʒss.
Vaselin. Liquid. ʒj—Misce.

℞. Ol. Eucalypti ʒj
Vaselin. Liquid. ʒj—Misce.

℞. Tinct. Iodi ʒiss
Glycerini ℥j
Alcoholis q. s. ad ℥iij—Misce.

℞. Tinct. Iodi ʒij
Acid. Carbolic. ʒij
Ext. Tolutani fl. ℥j
Glycerini ℥j
Alcoholis q. s. ad ℥iij—Misce.

℞. Ext. Cubebæ fl.
Ext. Tolutani sol. fl.
Tinct. Iodi
Tinct. Camphoræ
Acid. Carbolic. āā ʒj
Glycerini ℥i⅓
Alcoholis q. s. ad ℥iv.—Misce.

℞. Ext. Stramonii sem. fl.
Ext. Hyoscyami fl. āā ʒj
Ext. Belladonnæ fl. ʒss
Glycerini ℥j
Alcoholis q. s. ad ℥iij—Misce.

℞. Bals. Copaibæ ℥ss
Etheris ℥j
Vaselin. Liquid. q. s. ad ℥iv—Misce.

℞. Etheris
Vaselin. Liquid. āā ℥j—Misce.

℞. Tinct. Iodi ʒss
Glycerini ℥ss—Misce.

℞. Acid. Carbolic. gr. x.
Vaselin. Liquid. ℥j—Misce.

℞. Tinct. Benzoin. Comp. ℥j
Vaselin. Liquid. ℥ij—Misce.
Mix the two fluids: evaporate off the alcohol by gentle heat, filter—yields two ounces.

℞. Chloroform.
Vaselin. Liquid. āā ℥j—Misce.

This last formula provides an admirable method of producing local anæsthesia, and may also be utilised for the production of general anæsthesia.

We have used several of the above formulæ, and have found them to answer admirably: we quite endorse the statement that this apparatus is the best ever presented for treatment by medicated vapour.

There can be no question that by the use of this inhaler a fine spray of various active drugs can be introduced far down the respiratory tract. By a series of deep inspirations the lungs become so charged with the medicated vapour in so fine a spray that much of it is not deposited on the mucous membrane, but may be seen to escape on exhalation. These medicinal substances do clearly find their way far down: much of the spray remains, whilst a portion is exhaled again. We have thus a means by which medicinal bodies are brought into contact with a large area of respiratory mucous membrane on which they may exert a local influence, and through which they may reach the blood and the tissues of the body in general but of the lungs in particular. If inhalation is the thing, surely here we have the best of inhalers: whatever good is to be obtained by medication through the respiratory tract can best be obtained by such a machine as this. The apparatus is so devised that in the process of converting the medicine into vapour all the coarser globules are thrown against the sides of the container and condensed, while the most finely subdivided particles remain suspended in the atmosphere as a dense vapour until drawn into the air-passages, where the greater portion is arrested and retained, whilst a smaller portion is again discharged. The stability of the vapour is such that it will remain for several minutes, more or less, according to the density of the inhalant used, before condensing, and thus admit of thorough respiration and secure intimate contact of the medicament with the mucous membrane of the finest air-passages.

The range of application of this method of medication is a wide one, and must often be preferable to medication through the gastric mucous membrane: the respiratory membrane appears to be equally, if not better, adapted for the easy and rapid absorption of medicines than is that of the stomach or rectum: accordingly the method may be of use in the treatment of general diseases; it is, however, for the local treatment of nasal and pulmonary catarrh, laryngitis, membranous croup, hay-fever, diphtheria, bronchitis, pneumonia, asthma, and phthisis that the apparatus becomes of special, if not indispensable, value.

In the last-mentioned disease it may be utilised for the introduction of such drugs as iodoform, iodol, terebene, creasote, which, in solution and combination with liquid vaseline, appear to give rise to little irritation.

Pancreatized Cod Liver Oil. B. KEEN, Bristol.

This preparation is said to be nearly tasteless. It does not produce the discomfort and nausea so often occasioned by the oil itself.

Marshalls' Preparations of Wheat. JAMES & THOMAS MARSHALL, Glasgow.

These articles appear to be superior in nutritive value to the usual farinaceous foods. The starch-foods, apart from the starch they contain, derive their nutritive value from the milk in which they are cooked. These wheat-preparations can be employed for all the purposes to which starchy foods have been applied, but require no adventitious aid, inasmuch as they are themselves of great nutritive value.

Farola is a highly refined form of wheat-flour, in which no cellulose or irritating impurities remain. It is described as "the fat of kidneys of wheat," and as the "extract or essence of wheat." It is light, easy of digestion, pleasing to the palate, vieing with the finest arrowroot in elegance of appearance, whilst it is far superior in nutritive value.

Tritola is a food resembling Semolina in appearance, but differing chiefly in the larger size of its granules. The contents of the wheat-berry, after removal of the epidermis, are broken down into pearl-like granules, which preserve all the strength, flavour, and nutriment of the grain when cooked. Tritola naturally moulds itself into a firm and yet friable shape, which readily breaks down under the action of the digestive solvents.

Granola consists of the whole pure contents of the grain in a free granular state, with the exception of the germ. It contains a certain amount of disintegrated bran, and is intended to meet the wants of those who require an intestinal stimulant, more particularly those of sedentary habits. It contains all the elements necessary to the constitution of a perfect food.

The **Semolina** of this firm is the best part of the contents of the wheat-grain with all the husk removed, and in a free granular state: it is the product of a very high class wheat, is highly nutritious, palatable, and easily digested. It contains all the constituents of the best bread, and its granular shape fits it for a great variety of purposes in cookery for which flour or bread is not so well adapted.

Their **Oat Flour** is made from selected oats grown on the richest lands of the Lothians. The coarse and irritating parts of the grain are removed; what is retained is the pure flour, containing all that is of value for food.

All these preparations are capable of being cooked in a variety of ways for the table: recipes are given with each packet.

Coca Wine. ARMBRECHT, NELSON, & Co., London.

The Erythroxylon Coca, growing on the mountains of Bolivia and Peru, is now so well known as a powerful nerve stimulant as to need no description. It is now generally admitted that Coca strengthens the mental and physical powers, allays fatigue, abolishes hunger, and assuages thirst. In small doses it increases appetite and promotes digestion; it relieves the headache of nervous debility, and may be given with benefit in cases of opium and morphia habit. Armbrecht's preparation is made with Burgundy or Malaga, and one wineglassful represents one drachm of the leaves. We have found it of service in the early morning exhaustion of old people, and in removing the feeling of fatigue and exhaustion during the hot weather of the present summer.

PERISCOPE.

PHYSIOLOGY.

The Stomach.—Some important points in the anatomy and physiology of this organ, and their application in practice, are discussed by A. W. P. Leuf in the *Philadelphia Medical News*, April 16th, 1887. The following is a summary of his conclusions:—(1) This viscus is more nearly vertical than horizontal in position; (2) A healthy stomach when empty is tubular in form; (3) Simple, unirritating liquids pass directly through the tube; (4) also, if the stomach contains food such liquids pass through at once along the lesser curvature; (5) Digestion in the morning is hindered by the presence of mucus in the stomach; (6) Water drunk before meals dilutes and washes out this mucus, stimulates peristalsis, and causes hyperæmia of the lining membrane, thus aiding both digestion and elimination; (7) Cold water is best for those who have good power of reaction, but warm or hot water for others; (8) the addition of a little salt prevents the formation of unabsorbable parapeptones; (9) finally—water, drunk before, during, or after meals, does good rather than harm.

Biological Action of Copper.—In *A Medicina Contemporanea* for April and May, 1887, Dr. Curci publishes his researches on the above. He finds that in frogs copper causes paralysis of the cerebral motor centres and of the organs of circulation. In dogs it causes first paralysis of the reflex centres of the cord, then of the cerebral sensory centres, and lastly of the cerebral and spinal motor centres. Reflex action and sensibility to pain are abolished before motility is affected. Copper at first stimulates the intracardiac excito-motor nervous apparatus and the vaso-motor system generally, and causes increased arterial pressure; it then paralyses them and causes lowering of arterial pressure. It lowers the temperature by dispersion of heat. This, and the circulatory paralysis, account for the adynamia and collapse in cases of poisoning, of a certain duration, by the salts of copper. Death is caused by respiratory paralysis,

pulmonary œdema depending on vaso-motor paralysis, and cardiac paralysis. Copper is firstly and chiefly a nerve poison. Injected into the veins or hypodermically it does not cause vomiting.—*London Medical Record*, August, 1887.

ARTHUR B. PROWSE, M.D.

MEDICINE.

Endemic Goitre.—A paper on the above, embodying observations made during a visit of some months' duration to the high tableland of central Asia, N.W. of Cashmere, by Surgeon G. M. Giles, M.B., F.R.C.S., of H.M.I. Service, while in charge of the C.K. Mission, was published at Calcutta on Dec. 14th, 1886. This affection is common throughout a large portion of the N.W. Himalayas and Hindu-Kush mountains, and the proportion is at least 5 per cent. of the population. The majority of cases commence about puberty; but no age is exempt from the incidence of the disease. Between 12 and 13 months is the average time of residence for individuals from other districts before a goitre is developed. The prevalence of the affection among these mountains is, in most cases, roughly inversely proportional to the plentifulness of trees; but in one district, almost bare of forest growth, it is even less common than in the well-wooded parts. Now, where trees are plentiful, the rude cots of the natives are built of it, and are, perforce, much better ventilated than the dark and close mud huts of districts where wood is scarce. In the district above-mentioned, which is nearly exempt, notwithstanding the want of wood, the houses are built of stone, and are larger, and, moreover, are well ventilated by the central openings (four or five feet square) in the roofs, which serve the purpose of chimneys. "In spite of all that has been written and sung of the 'bold mountaineer,' the struggle for existence in such regions is so severe, that he is generally much more poorly off than the dweller in the plains, and his house and immediate surroundings proportionately insanitary." The Kashmiri garrison at Gilgit in two years have attained to an average of goitre probably rather higher than that of the indigenous population; and this may, doubtless, be ascribed to the fact that the fort is much the most crowded and insanitary portion of the village. Insanitary homes cannot, however, be more than a predisposing cause of goitre, for the wretched inhabitants of London cellar-tenements live in houses at least as crowded and quite as insanitary as those of the poorest mountaineers of Dardistan. Being on the march, the author's appliances for microscopic research

did not go beyond 250 diameters, and he necessarily had no conveniences for culture and inoculation-experiments; but from observations with the 'power' mentioned he is inclined to think that a species of low vegetable organism is the exciting cause of the disease. The general course of a goitre is to go on growing to a considerable size, and then to remain stationary; but a by no means insignificant number of cases, after reaching a certain size, undergo a spontaneous cure. The cysts appear to dry up, and the tumour to contract, leaving a number of nodules about the size of walnuts, and of cartilaginous hardness.

In three months the author treated more than 150 cases by the injection of liquor iodi, B.P. The method of procedure was as follows:—"The tumour is first carefully examined, so as to make out the number and position of the various cysts or lobules; the needle of the syringe is thrust into each of these in succession, and about twenty drops of the solution injected. If the lobes are large, soft, and not distinctly cystic, a small dose is injected into two or three portions of each." One skin-puncture only is necessary as a rule; and pain is exceptional, either during or subsequent to the operation. One sitting is often sufficient to cause a cure; but a weekly repetition of the injection will hasten matters. Under this treatment the goitre steadily shrinks, until nothing but a number of hard nodules are left, which, being very slightly vascular, might very well be excised subsequently. The author considers that the treatment involves no appreciable danger if a *watery* solution of iodine be used.

Should the Pleural Cavity be washed out?—This is discussed in a practical manner by Dr. Basil in the *Medical Chronicle*, Aug., 1887. He points out how very diverse is the teaching of standard medical and also surgical authors on this question. An epitome of some of the best recorded cases in which a fatal result has immediately supervened on the process then follows. In attempting to explain the causes of death or of dangerous seizures from pleural injections the author reviews—(1st) the broader question as to the causes of sudden death in pleural effusions, and (2nd) the conditions that tend to make the operation of injection dangerous or the reverse. The conclusions drawn are the following:—(1) When from the physical examination of the chest, the length of time the empyema has lasted, and the nature of the membrane binding down the lung, we feel sure that the chances of the lung expanding are very small, resection of an inch or two of rib, and thorough drainage by

position, is the better operation, as being comparatively free from risk, doing away very much with the necessity of using injections, and also diminishing the risk of injections by the free exit it affords. (2) If the pus contain flakes, coagula, fibrinous pieces, or shaggy masses, we must generally wash out, unless resection is done at once. (3) Where from the general state of the patient recovery is hopeless, but emptying of the empyema is forced on one, injection may be used with care should septic absorption set in. (4) In certain cases it is not easy to get consent for resection, and we must, if the discharge is fœtid, run the risk of pleural injection. (5) When from carelessness the drainage-tube has slipped in, among other means, washing-out of the pleural cavity may have to be resorted to. (6) In the adult the operation is always a dangerous one, and in every case we must have a clear object in view for running the risks. (7) The fluids recommended are freely-diluted Condy's fluid, weak solutions of boracic acid or of creasote, and solution of corrosive sublimate 1 in 6000 or 8000. It is best to use an arrangement in which gravitation is the force employed to introduce the fluid, instead of using a hand syringe; and the temperature of the fluid should be as nearly as possible that of the body. (8) It is a question whether atropia should not be used as a prophylactic to ward off the danger of reflex cardiac inhibition, or as an antidote in case of unpleasant symptoms setting in.

Adherent Pericardium.—Two instructive cases are reported by Dr. F. W. Mott, in the *Practitioner*, February, 1887. In each the striking symptom was ascites, with some enlargement of the liver. In both, pulmonary symptoms were prominent, pointing to old and recent pleurisy, with adhesions and thickening. In neither was there any history of acute rheumatism, and in both the disease seems to have commenced as a pleuro-pericarditis. In neither did the dropsy appear until six months after recovery from the acute attack. Other symptoms were, absence of apex-beat and signs of cardiac failure apart from valvular disease. The ascites was only temporarily relieved by paracentesis, and the fluid reaccumulated with great rapidity. The urine was scanty, but not albuminous. The difficulties of diagnosis were in both cases unusual, and, in the absence of positive signs, could only be established by a process of exclusion. The *post-mortem* appearances in their main features were identical.

In an excellent monograph by Riegel, in Volkmann's *Sammlung Klinischer Vorträge*, 1879, he points out the import-

ance of the weakness or absence of the apex-beat, both in diagnosis and prognosis; also that a distinct systolic recession indicates abnormal movement of the heart and pericardial adhesion, but it shows that the heart is acting powerfully and that there is either compensatory hypertrophy, or at any rate that the muscle-substance has not undergone degeneration. The prognosis, therefore, depends much upon the presence of this sign; for as the strength of the heart diminishes owing to degeneration, so this sign disappears.

Friedrich's Disease.—In *Le Progrès médical*, June 4th, 1887, Charcot has an able clinical lecture on the differential diagnosis between this disease and tabes on the one hand, and disseminated sclerosis on the other. He presented two patients, the younger of whom had suffered from Friedrich's disease for ten years, the elder from tabes for a similar period. In both there was marked motor inco-ordination of the upper extremities. In the lower limbs there was no loss of muscular power, and the patients could stand without support; but there was instability when the feet were approximated, or the eyes were shut, and both had the tabetic gait, and in both the knee-jerk was absent. The points in which they differed were as follows: The tabetic patient when seated was perfectly at rest, while the other was perpetually moving, the movements being involuntary and slow and resembling those seen in athetosis. The head oscillated from side to side or nodded, and from time to time there were grimaces. In the tabetic case there were also diplopia, strabismus, and sometimes drooping of the left eyelid. There was no atrophy of the optic nerves, but the Argyll-Robertson sign was well-marked. In the case of Friedrich's disease the pupils re-acted to light and to accommodation, they were equal, and there was neither diplopia nor strabismus; but there was some degree of nystagmus, a phenomenon very exceptional in tabes, but usual in disseminated sclerosis. The patient presented also another symptom belonging to the last-named disease; viz., slow articulation, and *scansion* of the words.

The case might possibly be regarded as one of tabes with disseminated sclerosis, or as a disseminated sclerosis with sclerosed areas in the posterior columns, giving rise to tabetic symptoms; but Charcot controverted both these views. Summing up the symptoms under their various systems—in Friedrich's disease there are not the lightning-pains, the hyperæsthesias or anæsthesias, nor the atrophy of the optic nerves, which are present in tabes. Neither are there the visceral neuroses nor the trophic lesions. It differs from dis-

seminated sclerosis in having neither the vertigo, nor the epileptiform attacks, nor the white atrophy, nor the optic neuritis. The choreiform instability does not cease during repose, and it is rhythmic, not spasmodic or jerky; the motor difficulties are not influenced by sight; and the knee-jerk is absent, not exaggerated.—*Edinburgh Medical Journal*, August, 1887.

Koprostatic Reflex Neuroses.—The most frequent of these, says Kisch (*Berliner klin. Woch.*, No. 15, 1887), is cardiac neurosis, evidenced by palpitation, and in some cases by vertigo and irregularity of the pulse. Next comes hemicrania. Difficult as its pathogenesis is to explain, it is undoubtedly often due to chronic constipation. Sciatica is another frequent result, to which various lumbo-abdominal and ovarian neuralgias are allied. Prof. Gussenbauer (*Präger med. Woch.*, No. 31, 1886) has already mentioned neuralgia of the fifth nerve in this connection. Of twenty-eight cases, all but four were cured by rectifying the constipation.—*London Medical Record*, July, 1887.

ARTHUR B. PROWSE, M.D.

SURGERY.

Unusual Site of a Hydatid Cyst.—A case of hydatid of the scrotum came under the care of Mr. Philip Muskett, in the Sydney Hospital. The patient, aged 25, had lived in a sheep-district, where the water was very bad, four years before the swelling appeared. This was first noticed eight years before he came under Mr. Muskett's care. During that time the swelling had been twice tapped, and on the second occasion injected with iodine. When admitted to the hospital there was a large intra-scrotal tumour, the size of an emu egg, on the right side. This was translucent, and presented the usual characteristics of a hydrocele. The cyst was tapped, and an ounce of pale yellowish fluid drawn off. Suppuration followed; and thirteen days later, six ounces of pus were drawn off. After this, pus drained away from the puncture for eleven days; then a hydatid sac partly forced its way out, and was partly extracted through this opening. The sac was greyish in colour, translucent and elastic; and in its sunken condition would about fill an egg-cup. The swelling gradually subsided, the sinus closed, and the patient left cured.—*The Medical and Surgical Reporter*, Feb. 26th, 1887.

The Treatment of Hernia by Subcutaneous Injection.—At a meeting of the New York Medical Society, Dr. De Garmo brought forward the subject of radical cure of

hernia. During the last seven years he had treated over 100 cases by Heaton's method of injecting astringent and mildly irritating fluids, such as a solution of oak-bark, into the inguinal canal outside the sac. The object is to fortify the fibrous tissues surrounding the canal, that protrusion should not occur. Dr. De Garmo complained that the method had been put to unfair tests. Patients had been allowed to go about without support, after rising from the bed, seven to ten days after the operation. Another error was the anticipation of cure in old hernia by a single injection. The most favourable cases were those of oblique inguinal hernia of recent date, in which but few pathological changes had occurred.

He concluded from the results of his cases treated on this plan, that the operation is free from danger. That over 45 per cent. of all cases could be cured by it; and in selected cases, 50 to 75 per cent. That many extreme cases, uncontrollable by a truss, could be brought under control by the operation. That it was followed by improvement in almost every instance. That children not cured by mechanical means could in almost every instance be cured by this method.—*New York Medical Journal*, Feb. 19th, 1887.

Rectal Injections in Cystitis and Enlarged Prostate.—Dr. Vercoe calls attention to the value of rectal injections of hot water in cases of enlarged prostate and cystitis. He irrigates the prostate and base of the bladder with hot water, applied directly to the parts through a large double-eyed catheter passed per anum.—*The Medical Age*, Aug. 10th, 1887.

[This very simple treatment, often of great value, has not received the attention it deserves.]

W. J. PENNY.

THERAPEUTICS.

Nitro-glycerine in Mitral Stenosis.—In the *Liverpool Medico-Chirurgical Journal*, July, 1887, is an interesting paper by Dr. Barr on the treatment of cases of mitral stenosis. He says that there is no single remedy of such value in these cases as nitro-glycerine, but is careful to explain that he does not mean that it is a universal panacea for all cases and complications, or that its use is always necessary or advisable. The object aimed at is "to equalise the disturbed balance of circulation and to lessen the high pulmonic tension," thus enabling the right ventricle to perform its work more thoroughly. This is effected by the dilatation of the systemic vessels by the drug, and by limiting the amount

of fluid ingested, by moderate catharsis, by passive exercise of the muscles, and by active exercise when the patient is fit for it.

[I have had under observation for some months in the out-patient department of the Bristol Royal Infirmary a young woman, the subject of considerable stenosis of the mitral orifice. The persistent impediment to the circulation is clearly evidenced by the state of the extremities, especially of the fingers, which are always more or less cold, livid, swollen and painful. In this case nitro-glycerine always produces considerable amelioration of these and other symptoms. The dose given has never exceeded $\frac{1}{100}$ of a minim thrice daily.]

ARTHUR B. PROWSE, M.D.

Benzoin in the Treatment of Ulcers.—In the *Russkaia Meditzina*, No. 35, 1886, Dr. Voskresensky speaks highly of benzoin as a specific remedy for treating ulcers of all kinds, especially those which occur in emaciated, cachectic, and old persons.

The author employs it in the shape of a salve, prepared *ex tempore* of two drachms of resina benzoes, half an ounce of yellow wax, and half an ounce of lard.

The ointment is spread in a moderately thick layer on a piece of linen, and placed on the ulcer. The dressing, as a rule, should be changed twice a day, but in bad cases three times daily.—*Medical and Surgical Reporter*, Feb. 19th, 1887.

W. J. PENNY.

DERMATOLOGY.

Alopecia Areata.—The question whether this affection is a parasitic or nervous one is of practical importance. Dr. Wyss, of Geneva, reports (*Der Fortschritt*, Jan. 5th, 1887) the case of a child in which the patches were strictly localised to the left half of the scalp. Dr. Joseph (*Monat. f. prakt. Dermat.*, Nov., 1886) recently made experiments with cats on the etiology of the disease, in Du Bois-Reymond's Physiological Institution at Berlin. He observed, after the division of the spinal ganglion of the second cervical nerve, in every case a depilation analogous to that of the disease, without any previous inflammatory symptoms on the circumscribed patches of skin. He, therefore, considers the disease a lesion of the trophic cutaneous nerves. Buchin states (*Monat. f. prakt. Dermat.*, No. 10, 1887) that there are striking instances on record of alopecia areata having been produced

epidemically. He quotes examples from Gillette and one from Nogent, in which the epidemic attacked 400 children, and also a number of recruits in the 122nd Line Regiment (French).—*London Medical Record*, June and Aug., 1887.

[In connection with these quotations from French authorities the thought suggests itself that they use the term alopecia areata in a much wider sense than we are accustomed to.]

ARTHUR B. PROWSE, M.D.

OPHTHALMOLOGY.

Sympathetic Ophthalmitis. — A good example of the value of co-operative work is afforded by the "Report" on this terrible affection, based upon the notes of 200 cases. The conclusions (in addition to facts included in text-books) are as follows:—(1) Sympathetic ophthalmitis never occurs without *perforation* of the exciting eye, either by wound, or ulceration, &c. (2) It generally occurs within one year of the injury. (3) It may occur at a greater interval, provided recurrent inflammation affects the injured eye. The interval between the last recurrence and the onset of the affection in the sympathising eye would be less than twelve months. The longest interval after the primary injury was twenty years. (4) The shortest interval reported was nine days. (5) Excision of the exciting eye, after sympathetic mischief has set in, does not apparently affect the progress of the disease one way or the other. (6) The effect of mercury in these cases is *nil*. (7) Iridectomy on the exciting eye, after commencement of the sympathetic mischief, in a few cases, has appeared to produce a favourable result. On the sympathising eye the results were less unfavourable than have generally been supposed. (8) In cases where the disease has appeared after excision of the exciting eye, the disease was due to the condition of the eyeball, and not to the operation.—*Liverpool Medico-Chirurgical Journal*, Jan., 1887.

Retinal Hæmorrhage in Anæmia.—An important observation in regard to this has been made by Dr. Stephen Mackenzie. It has for some time been recognised that in "pernicious anæmia" these hæmorrhages occur, and they have been to some extent relied upon as diagnostic of this intractable disease. But by observation of cases of anæmia secondary to loss of blood, Dr. Mackenzie concludes that the hæmorrhages are indicative rather of the degree than the nature of the anæmia. The blood was examined in reference to the number of red corpuscles, and the amount of hæmo-

globin. When the corpuscular richness falls below 50 per cent. of the normal, a condition of retinal danger is established. As a clinical test he states that as long as any pink colour can be seen through the finger-nails, the corpuscular richness is above 50 per cent. The quantity of hæmoglobin exercises a qualifying influence on the main factor, according as it is greater or less than the corpuscular deficiency.—*Liverpool Medico-Chirurgical Journal*, Jan., 1887.

ARTHUR B. PROWSE, M.D.

LARYNGOLOGY.

Statistics of Croup and Diphtheria.—From the reports of thirteen children's hospitals in Germany, Austria, and Russia, it appears that in 1884 there were admitted 1234 cases of croup and diphtheria, of which 556 died, a mortality of 45·05 per cent.

During the same period tracheotomy was performed in 438 cases, of which 164 recovered, a percentage of 37.44.

The plan of treatment in regard to tracheotomy seems to have varied widely at the different institutions. Thus, at St. Anne's Hospital, Vienna, where there were 214 cases, and 78 deaths, tracheotomy was performed in 144 cases, of which 74 recovered (51.4 per cent.): while at the Elizabeth Hospital, St. Petersburg, there were 89 cases and 49 deaths; but tracheotomy was performed only once, and then unsuccessfully.—*Jahrbuch f. Kinderheilk.*, B. xxiv., H. 4, and *Edinburgh Medical Journal*, Aug., 1887.

ARTHUR B. PROWSE, M.D.

PATHOLOGY.

Sensory Aphasia.—At the Liverpool Medical Institute, Dr. Wiglesworth exhibited a brain taken from a female patient, aged 65, who had been the subject of the amnesic or sensory form of aphasia. She had been able to say numerous words and sentences, but could not apply them properly; was quite unable to name any common object, and, as a rule, even to recognise the name when told it, but could sometimes indicate its use. She could not read, nor could she write, either from a copy or from dictation. She was to a certain extent conscious of her defect, but clearly often did not understand what was said to her.

The left hemisphere presented a deep depression, occupying the situation of the inferior parietal lobule, and encroaching upon the temporo-sphenoidal lobe: this was due to the

destruction and absorption of convolutions in this area, viz., the posterior three-fourths, or rather more, of the supra-marginal; the anterior three-fourths of the angular; and the posterior half of the first temporo-sphenoidal. The destruction extended from the surface into the white matter almost down to the lateral ventricle. It was apparently due to necrotic softening, owing to obstruction of the vessel supplying the area in question. All the cerebral arteries were considerably degenerated.—*Liverpool Medico-Chirurgical Journal*, Jan., 1887.

Subcutaneous Ether Injections.—MM. Pitres and Vaillard have published *(Le Progrès médical*, May 21st 1887) some notes on the effects which the subcutaneous injection of ether has produced on the nerves in its neighbourhood. They find that when the injection has been so directed as to approach the main nerve-trunks, it has set up after a few hours a neuritis in which the myelin first blends with the cylinder-axis, and then the whole nerve-structure becomes indistinct in a state of acute inflammation. The subsequent degeneration spreads downwards, never upwards, and re-generation begins in a special fashion. In fact, ether under these conditions produces an immediate necrosis of nerve-fibres; and it is just possible it may be of use in those cases where nerve-stretching is at present employed.—*Practitioner*, July, 1887.

A Case of Hermaphroditism.—Dr. M. F. Podestá, in the February number of *Los Anales del Círculo Médico Argentino*, describes the following case:—

One morning there came to the Italian Hospital a woman named Mary N., æt. 24. Italian by birth, of strong constitution, florid, and of medium stature; she at once attracted attention by her manly appearance, not at all in keeping with her female apparel. Her face lacked those smooth and correct lines that tend to produce beauty in woman, and which also accentuate the sexual expression; instead, the lines were hard and manly, her complexion bronzed, her upper lip covered with a black moustache such as a young man of twenty years might have, her hair was short, hard and unyielding to the female *toilette*, her forehead low, the mouth large with thick lips, eyes black and expressive, with long lashes and heavy eyebrows.

Altogether her features and general appearance had much more of the male than the female type. Her voice was rough, strong, and altogether wanting in the sweetness that characterises the female voice.

On being asked whether she was married, she bent her

head, became confused, and then answered in the affirmative, adding that she had been married five years but had had no family.

She complained of some gastric trouble and painful micturition.

On examination of the genital organs a well-developed penis was discovered, having at its base two folds of thick skin well covered with hair and closely resembling the labia majora. The penis was of good shape, the glans being covered by a freely movable prepuce, the meatus urinarius was situated on the inferior face of the glans penis on a level with its mouth (or base), a case of true hypospadias.

The two thick folds of skin mentioned above were situated one each side of the perineum, and although they closely resembled the labia majora, they were evidently a divided scrotum without testicles. On separating these lips a smooth surface was found somewhat red towards the front and free from hairs, but not a trace of a vaginal opening. Pressure on this part with the finger gave a firm resistance, and was similar in character and seemed to form an integral part of the perineal plane.

By abdominal palpation and rectal examination, no signs of ovaries or uterus could be discovered.

Pressure on the urethra caused some purulent matter similar to blenorrhagic pus to escape.

The patient appeared to be one of those unfortunate beings on whom Nature seemed to have stopped undecided when on the point of setting the stamp that characterises the sex, thereby producing a mixture of man and woman.

The general appearance of the patient is as follows:—

Neck long, muscular, erect, manly.

Thorax manly, not a trace of mammary gland, very small nipples.

Chest-walls somewhat flat and hollow, slightly covered with hairs.

Respiration abdominal.

The pelvis has neither the diameter nor the anatomical arrangements that are observed in the female pelvis.

On placing the patient in the erect position, with the thighs together, the penis protrudes to the extent of three centimetres from beneath a well-covered pubes.

The attitudes and movements of the patient are manly.

The arms are strong, muscular, and covered with hairs.

There has never been a menstrual flow. Once only there was a slight loss of blood from the urethra.

J. Bain Sincock.

SCRAPS

PICKED UP BY THE ASSISTANT-EDITOR.

The New Nomenclature.—Georgie: "Do you know, Ethel, old Stokes had a perplexity fit the other day?" Ethel: "A perplexity fit? You mean a parallel stroke."

Vaccination.—According to the Chicago *Town Topics*, a story is going about that a certain "fayre ladye," who has made herself more than prominent in social and amateur theatrical circles, and in wearing an extremely low *corsage*, was anxious to be vaccinated before her recent departure for Europe. She consulted her physician on the subject, impressing upon him the absolute importance of performing the operation where it could not be seen, so that it would not interfere with her social and dramatic engagements. The doctor thought deeply on the all-important subject, and then advised her to swallow it.—*The Medical Press of Western New York.*

Too many at once.—It was the custom of the Roman physicians to visit their patients attended by all their pupils. Perhaps some hospital patients now-a-days have the same feelings that Martial had when he wrote the following epigram (V. ix.):

Languebam: sed tu comitatus protinus ad me
Venisti centum, Symmache, discipulis.
Centum me tetigere manus, Aquilone gelatæ.
Non habui febrem, Symmache: nunc habeo.

Here follow a couple of local attempts to render the above in English epigram:

(I.) TO DR. SYMMACHUS.

Hygiea frowned; thou sped'st with all thy train—
A hundred students—to relieve the pain:
Felt me all o'er; no fever racked my brow;
All Ætna's raging fires consume me now!

(II.) When out of sorts, to Symmachus I sent.
A hundred pupils came along with him.
With chilling touch, and but on study bent,
They start a fever through my every limb.

Notes from Dublin.—A correspondent of the *Irish Times* says that after the visit of the British Medical Association in 1867 "there was such an epidemic of hypochondriacs as frightened the whole community. Numbers of men, ay and women, aged and not, was readin' in the papers about all the diseases and maledictions that flesh is heir to, but doesn't always come into possession of any more than other heirs; and some of them took at once to bed, and fancied they had the same troubles themselves in elbow, heart, or heel." And he goes on to say: "I'm afeard that now we'll have the same over again. But I'm the worst enemy they have in the world; and as for their drugs, I consider that what isn't pleasant to the taste isn't welcome to the intayrior. It's a comfort the death-rate won't be heavy when the doctors is busy in other matters."

At the recent meeting a French doctor, returning thanks at one of the entertainments for the way in which the visitors had been received, said, "All Dooblin is von hospital boord." Of course this elicited some laughter, whereupon the guest said, "It is not faire; you do laugh at mine Englishe." But he was re-assured when one said to him, "You have unwittingly hit on

a great truth. We have fifteen or sixteen hospitals in Dublin, and are of a verity over-hospitalled."—*Daily Express.*

"What is that medicine you are giving me, doctor?" "An emetic." "I won't take it: sorra use in it. The doctors in Dublin gave me two of them, and neither of 'em stayed two minutes on my stomach."—*The Hospital.*

The Prince of Wales's Historic Glass of Norfolk Ale.—Mr. John Bicker-Dyke writes to *The Daily Telegraph*:—"In your leader on 'The Curiosities of Ale and Beer,' you make mention of 'the historic glass of Norfolk ale for which the Prince of Wales asked after the turning crisis of his illness.' For the purposes of the chapter on the medicinal qualities of ale and beer I endeavoured, towards the end of last year, to obtain an accurate account of the circumstances surrounding that historic draught of barley wine. By Mr. Francis Knollys, to whom I first applied, I was referred to Sir William Gull, and permission was given me to publish whatever information on the subject he might afford. Sir William, I am sorry to find, looked upon the whole affair as a delusion on the part of the too credulous public. 'I regret,' he wrote, 'to have to destroy the illusion respecting the story of the bitter beer referred to in your letter. I can assure you the Prince never asked for bitter beer, and that it cannot be credited with any part of the successful issue of that important case.' As it cannot for a moment be supposed that the Prince of Wales's eminent medical adviser would draw any subtle distinction between bitter beer and other varieties of malt liquor in such a case as this, the ale was neither asked for nor given—at any rate, with the knowledge of Sir William Gull. It is curious, however, that the story, which appeared in several of the leading London journals, and which has for many years been generally accepted as accurate, should have remained so long uncontradicted. The incident illustrates the way in which history is made."

Sympathy.—Dr. Bowditch, of Boston, U.S.A., says:—"We are all members of a profession which, when regarded in its true light, above the plane of party strife and mere selfish gain, I regard as the finest and noblest of all, and the feeling grows stronger within me each year of practice. There is that in it far above the mere desire and ability to cure disease—that which can soothe all regrets for possible failure and disappointment in our daily work—I mean the power of human sympathy; the power which bids the young mother silently and gratefully press the hand that helped her in her hours of trial; the power that impels the dying man, at the very last, to turn to him who, though powerless to save, yet by a word, a look, a touch of the hand, gives strength and courage to one just passing to that 'undiscovered country from whose bourne no traveller returns.' In the midst of discord and disappointment let us keep this thought before us, and at the end perhaps we may be permitted to see our past life, as it were, stretched out before us, and feel that we have done our small share towards making our chosen profession what it should be—a blessing to all mankind."—*The Medical Age.*

Most medical men become aware, as they gain experience in their profession, that their popularity depends a good deal upon their manner in treating patients. But merely to study manners for the sake of popularity, is to risk their degenerating into "mannerism." Those who look upon their professsion as a Divine calling will remember to pray daily for sympathy; and, having prayed, they will go forth on their mission of healing without any studied effort to maintain manners, but rather trusting to the Great Physician to manifest His sympathy through them as He wills, and when He wills.—*The Hospital.*